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| ☐ | L91 | L90 AND netrin | 20 |
| ☐ | L90 | UNC5 | 48 |
| ☐ | L89 | L88 AND UNC5 | 13 |
| ☐ | L88 | 530/350.CCLS. | 14835 |
| ☐ | L87 | L86 AND UNC5 | 6 |
| ☐ | L86 | 536/23.1,23.5.CCLS. | 17136 |
| ☐ | L85 | Smithson.IN. | 608 |
| ☐ | L84 | Smithson-G.IN. | 126 |
| ☐ | L83 | Smithson-G.IN. | 126 |
| ☐ | L82 | Smithson-Glennda.IN. | 91 |
| ☐ | L81 | Stone-D.IN. | 41 |
| ☐ | L80 | Stone-D-J.IN. | 93 |
| ☐ | L79 | Stone-DJ.IN. | 0 |
| ☐ | L78 | Stone-David.IN. | 24 |
| ☐ | L77 | Stone-David-J.IN. | 60 |
| ☐ | L76 | MacDougall-J.IN. | 17 |
| ☐ | L75 | MacDougall-J-R.IN. | 95 |
| ☐ | L74 | MacDougall-John.IN. | 15 |
| ☐ | L73 | MacDougall-John-R.IN. | 68 |
| ☐ | L72 | MacDougall.IN. | 663 |
| ☐ | L71 | Ellerman-K.IN. | 95 |
| ☐ | L70 | Ellerman-Karen.IN. | 66 |
| ☐ | L69 | Ellerman.IN. | 209 |
| ☐ | L68 | Gerlach-V.IN. | 78 |
| ☐ | L67 | Gerlach-Valerie.IN. | 62 |
| ☐ | L66 | Gerlach-V-L.IN. | 67 |
| ☐ | L65 | Gerlach-Valerie-L.IN. | 34 |
| ☐ | L64 | Gerlach.IN. | 2687 |
| ☐ | L63 | Burgess-C.IN. | 27 |
| ☐ | L62 | Burgess-Catherine.IN. | 13 |
| ☐ | L61 | Burgess-C-E.IN. | 137 |
| ☐ | L60 | Burgess-Catherine-E.IN. | 116 |
| ☐ | L59 | Burgess.IN. | 4134 |

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| | | | |
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| ☐ | L58 | Lepley-D.IN. | 5 |
| ☐ | L57 | Lepley-D-M.IN. | 61 |
| ☐ | L56 | Lepley-Denise.IN. | 1 |
| ☐ | L55 | Lepley-Denise-M.IN. | 40 |
| ☐ | L54 | Lepley.IN. | 280 |
| ☐ | L53 | Alsobrook-J.IN. | 4 |
| ☐ | L52 | Alsobrook-J-P.IN. | 89 |
| ☐ | L51 | Alsobrook-John.IN. | 0 |
| ☐ | L50 | Alsobrook-John-P.IN. | 1 |
| ☐ | L49 | Alsobrook.IN. | 225 |
| ☐ | L48 | Gusev-W.IN. | 0 |
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| ☐ | L46 | Gusev-William.IN. | 0 |
| ☐ | L45 | Gusev-William.IN | 0 |
| ☐ | L44 | Grosse-William-M.IN. | 47 |
| ☐ | L43 | Grosse.IN. | 1822 |
| ☐ | L42 | Gusev-V.IN. | 20 |
| ☐ | L41 | Gusev-V-Y.IN. | 36 |
| ☐ | L40 | Gusev-Vladimir-Y.IN. | 24 |
| ☐ | L39 | Gusev.IN. | 3096 |
| ☐ | L38 | Li-L.IN. | 1673 |
| ☐ | L37 | Li-Li.IN. | 372 |
| ☐ | L36 | Li.IN. | 51344 |
| ☐ | L35 | Shenoy-S.IN. | 522 |
| ☐ | L34 | Shenoy-S-G.IN. | 90 |
| ☐ | L33 | Shenoy-Suresh-G.IN. | 67 |
| ☐ | L32 | Shenoy.IN. | 522 |
| ☐ | L31 | Shenoy.IN. | 522 |
| ☐ | L30 | Spytek-K.IN. | 9 |
| ☐ | L29 | Spytek-K-A.IN. | 174 |
| ☐ | L28 | Spytek-Kimberly.IN. | 9 |
| ☐ | L27 | Spytek-Kimberly-A.IN. | 124 |
| ☐ | L26 | Spytek-Kimberly-Ann.IN. | 8 |
| ☐ | L25 | Spytek.IN. | 319 |
| ☐ | L24 | Zerhusen-B.IN. | 12 |
| ☐ | L23 | Zerhusen-B-D.IN. | 93 |
| ☐ | L22 | Zerhusen-Bryan-D.IN. | 76 |
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| ☐ | L19 | Shimkets-R-A.IN. | 188 |

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| ☐ | L15 | Spaderna-S-K.IN. | 53 |
| ☐ | L14 | Spaderna-Steven-K.IN. | 33 |
| ☐ | L13 | Spaderna-Steven-Kurt.IN. | 6 |
| ☐ | L12 | Spaderna.IN. | 154 |
| ☐ | L11 | Rastelli-L.IN. | 114 |
| ☐ | L10 | Rastelli-Luca.IN. | 80 |
| ☐ | L9 | Rastelli.IN. | 276 |
| ☐ | L8 | Padigaru-M.IN. | 152 |
| ☐ | L7 | Padigaru-Muralidhara.IN. | 116 |
| ☐ | L6 | Padigaru.IN. | 270 |
| ☐ | L5 | Taupier-Raymond.IN. | 0 |
| ☐ | L4 | Taupier-R-J.IN. | 100 |
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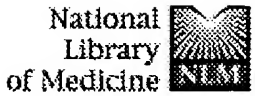



1: Porter AG, Dhakshinamoorthy S. Related Articles, Links

Apoptosis initiated by dependence receptors: a new paradigm for cell death?
Bioessays. 2004 Jun;26(6):656-64. Review.
PMID: 15170863 [PubMed - indexed for MEDLINE]

2: Zhong Y, Takemoto M, Fukuda T, Hattori Y, Murakami F, Nakajima D, Nakayama M, Yamamoto N. Related Articles, Links

Identification of the Genes that are Expressed in the Upper Layers of the Neocortex.
Cereb Cortex. 2004 May 13 [Epub ahead of print]
PMID: 15142956 [PubMed - as supplied by publisher]

3: Nishiyama M, Hoshino A, Tsai L, Henley JR, Goshima Y, Tessier-Lavigne M, Poo MM, Hong K. Related Articles, Links

Cyclic AMP/GMP-dependent modulation of Ca2+ channels sets the polarity of nerve growth-cone turning.
Nature. 2003 Jun 26;423(6943):990-5.
PMID: 12827203 [PubMed - indexed for MEDLINE]

4: Geisbrecht BV, Dowd KA, Barfield RW, Longo PA, Leahy DJ. Related Articles, Links

Netrin binds discrete subdomains of DCC and UNC5 and mediates interactions between DCC and heparin.
J Biol Chem. 2003 Aug 29;278(35):32561-8. Epub 2003 Jun 16.
PMID: 12810718 [PubMed - indexed for MEDLINE]

5: Guan W, Condic ML. Related Articles, Links

Characterization of Netrin-1, Neogenin and cUNC-5H3 expression during chick dorsal root ganglia development.
Gene Expr Patterns. 2003 Jun;3(3):369-73.
PMID: 12799087 [PubMed - indexed for MEDLINE]

6: Tsai HH, Tessier-Lavigne M, Miller RH. Related Articles, Links

Netrin 1 mediates spinal cord oligodendrocyte precursor dispersal.
Development. 2003 May;130(10):2095-105.
PMID: 12668624 [PubMed - indexed for MEDLINE]

7: Engelkamp D. Related Articles, Links

Cloning of three mouse Unc5 genes and their expression patterns at mid-gestation.
Mech Dev. 2002 Oct;118(1-2):191-7.
PMID: 12351186 [PubMed - indexed for MEDLINE]

8: Keleman K, Dickson BJ. Related Articles, Links

Short- and long-range repulsion by the Drosophila Unc5 netrin receptor.
Neuron. 2001 Nov 20;32(4):605-17.
PMID: 11719202 [PubMed - indexed for MEDLINE]

Hong K, Hinck L, Nishiyama M, Poo MM, Tessier-Lavigne M,

h cb h g e e e fcg e ch b e

9: Stein E. Related Articles, Links

A ligand-gated association between cytoplasmic domains of UNC5 and DCC family receptors converts netrin-induced growth cone attraction to repulsion.
Cell. 1999 Jun 25;97(7):927-41.
PMID: 10399920 [PubMed - indexed for MEDLINE]

10: Wang H, Copeland NG, Gilbert DJ, Jenkins NA, Tessier-Lavigne M. Related Articles, Links

Netrin-3, a mouse homolog of human NTN2L, is highly expressed in sensory ganglia and shows differential binding to netrin receptors.
J Neurosci. 1999 Jun 15;19(12):4938-47.
PMID: 10366627 [PubMed - indexed for MEDLINE]

11: Bloch-Gallego E, Ezan F, Tessier-Lavigne M, Sotelo C. Related Articles, Links

Floor plate and netrin-1 are involved in the migration and survival of inferior olivary neurons.
J Neurosci. 1999 Jun 1;19(11):4407-20.
PMID: 10341242 [PubMed - indexed for MEDLINE]

12: Ackerman SL, Knowles BB. Related Articles, Links

Cloning and mapping of the UNC5C gene to human chromosome 4q21-q23.
Genomics. 1998 Sep 1;52(2):205-8.
PMID: 9782087 [PubMed - indexed for MEDLINE]

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Items 1-12 of 12 One page.



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PROCESSING COMPLETED FOR L1
L2 104 DUP REM L1 (82 DUPLICATES REMOVED)

=> D L2 1-104

L2 ANSWER 1 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AN 2004:412914 CAPLUS
DN 140:418551
TI Genes inducible by BHDF, a method for increasing synaptic growth or plasticity by overexpressing the same, and therapeutic uses
IN Black, Ira B.
PA University of Medicine and Dentistry of New Jersey, USA
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2004041778 | A2 | 20040521 | WO 2003-US34777 | 20031031 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-422986P P 20021101

L2 ANSWER 2 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
AN 2004:293433 CAPLUS
DN 140:333590
TI Human cDNA sequences and their encoded proteins and diagnostic and therapeutic uses
IN Shimkets, Richard A.; Taupier, Raymond J.; Burgess, Catherine E.; Zerhusen, Bryan D.; Mezes, Peter S.; Rastelli, Luca; Malyankar, Uriel M.; Grosse, William M.; Alsobrook, John P.; Lepley, Denise M.; Spytek, Kimberly Ann; Li, Li; Edinger, Shlomit; Gerlach, Valerie; Ellerman, Karen; MacDougall, John R.; Gunther, Erik; Millet, Isabelle; Stone, David J.; Smithson, Glennda; Szekeres, Edward S.; Ji, Weizhen
PA USA
SO U.S. Pat. Appl. Publ., 248 pp., Cont.-in-part of U.S. Ser. No. 972,211.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | US 2004068095 | A1 | 20040408 | US 2002-96625 | 20020313 |
| | US 2004048245 | A1 | 20040311 | US 2001-972211 | 20011005 |
| PRAI | US 2001-275892P | P | 20010314 | | |
| | US 2001-296860P | P | 20010608 | | |
| | US 2001-972211 | A2 | 20011005 | | |
| | US 2000-238323P | P | 20001005 | | |
| | US 2000-238325P | P | 20001005 | | |
| | US 2000-238372P | P | 20001006 | | |
| | US 2000-238373P | P | 20001006 | | |
| | US 2000-238379P | P | 20001006 | | |
| | US 2000-238382P | P | 20001006 | | |
| | US 2000-238383P | P | 20001006 | | |
| | US 2000-238384P | P | 20001006 | | |
| | US 2000-238397P | P | 20001006 | | |
| | US 2000-238400P | P | 20001006 | | |
| | US 2000-238401P | P | 20001006 | | |
| | US 2000-238402P | P | 20001006 | | |

L2 ANSWER 3 OF 104 USPATFULL on STN
AN 2004:138995 USPATFULL
TI System and method for neuronal network analysis
IN Evans, Daron G., Dallas, TX, UNITED STATES
PI US 2004106168 A1 20040603
AI US 2003-370786 A1 20030220 (10)

PRAI US 2002-430409P 20021202 (60)
DT Utility
FS APPLICATION
LN.CNT 1747
INCL INCLM: 435/040.500
INCLS: 435/029.000; 435/283.100
NCL NCLM: 435/040.500
NCLS: 435/029.000; 435/283.100
IC [7]
ICM: G01N033-48
ICS: C12M001-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 4 OF 104 USPATFULL on STN
AN 2004:126898 USPATFULL
TI Novel proteins and nucleic acids encoding same
IN Taupier, Raymond J., JR., East Haven, CT, UNITED STATES
Padigaru, Muralidhara, Branford, CT, UNITED STATES
Rastelli, Luca, Guilford, CT, UNITED STATES
Spaderna, Steven Kurt, Berlin, CT, UNITED STATES
Shimkets, Richard A., West Haven, CT, UNITED STATES
Zerhusen, Bryan D., Branford, CT, UNITED STATES
Spytek, Kimberly Ann, New Haven, CT, UNITED STATES
Shenoy, Suresh G., Branford, CT, UNITED STATES
Li, Li, Cheshire, CT, UNITED STATES
Gusev, Vladimir Y., Madison, CT, UNITED STATES
Grosse, William M., Branford, CT, UNITED STATES
Alsobrook, John P., II, Madison, CT, UNITED STATES
Lepley, Denise M., Branford, CT, UNITED STATES
Burgess, Catherine E., Wethersfield, CT, UNITED STATES
Gerlach, Valerie L., Branford, CT, UNITED STATES
Ellerman, Karen, Branford, CT, UNITED STATES
MacDougall, John R., Hamden, CT, UNITED STATES
Stone, David J., Guilford, CT, UNITED STATES
Smithson, Glennda, Guilford, CT, UNITED STATES
PI US 2004096877 A1 20040520
AI US 2003-624932 A1 20030721 (10)
RLI Continuation of Ser. No. US 2001-918779, filed on 30 Jul 2001, ABANDONED
PRAI US 2000-221409P 20000728 (60)
US 2000-222840P 20000804 (60)
US 2000-223752P 20000808 (60)
US 2000-223762P 20000808 (60)
US 2000-223770P 20000808 (60)
US 2000-223769P 20000808 (60)
US 2000-225146P 20000814 (60)
US 2000-225392P 20000815 (60)
US 2000-225470P 20000815 (60)
US 2000-225697P 20000816 (60)
US 2001-263662P 20010201 (60)
US 2001-281645P 20010405 (60)
DT Utility
FS APPLICATION
LN.CNT 11006
INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/320.100; 435/325.000; 530/350.000; 530/388.100; 536/023.500
NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/320.100; 435/325.000; 530/350.000; 530/388.100; 536/023.500
IC [7]
ICM: C12Q001-68
ICS: C07H021-04; C07K014-47; C07K016-18
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L2 ANSWER 5 OF 104 USPATFULL on STN
AN 2004:94708 USPATFULL
TI Molecular toxicology modeling
IN Mendrick, Donna, Gaithersburg, MD, UNITED STATES
Porter, Mark, Gaithersburg, MD, UNITED STATES
Johnson, Kory, Gaithersburg, MD, UNITED STATES
Higgs, Brandon, Gaithersburg, MD, UNITED STATES
Castle, Arthur, Gaithersburg, MD, UNITED STATES
Elashoff, Michael, Gaithersburg, MD, UNITED STATES
PI US 2004072160 A1 20040415
AI US 2002-152319 A1 20020522 (10)
PRAI US 2001-292335P 20010522 (60)

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        US 2001-297523P     20010613 (60)
        US 2001-298925P     20010619 (60)
        US 2001-303810P     20010710 (60)
        US 2001-303807P     20010710 (60)
        US 2001-303808P     20010710 (60)
        US 2001-315047P     20010828 (60)
        US 2001-324928P     20010927 (60)
        US 2001-330867P     20011101 (60)
        US 2001-330462P     20011022 (60)
        US 2001-331805P     20011121 (60)
        US 2001-336144P     20011206 (60)
        US 2001-340873P     20011219 (60)
        US 2002-357843P     20020221 (60)
        US 2002-357842P     20020221 (60)
        US 2002-357844P     20020221 (60)
        US 2002-364134P     20020315 (60)
        US 2002-370206P     20020408 (60)
        US 2002-370247P     20020408 (60)
        US 2002-370144P     20020408 (60)
        US 2002-371679P     20020412 (60)
        US 2002-372794P     20020417 (60)
DT      Utility
FS      APPLICATION
LN.CNT 27909
INCL    INCLM: 435/006.000
        INCLS: 435/091.200; 436/084.000
NCL     NCLM:  435/006.000
        NCLS:  435/091.200; 436/084.000
IC      [7]
        ICM: C12Q001-68
        ICS: C12P019-34; G01N033-20
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2   ANSWER 6 OF 104  USPATFULL on STN
AN      2004:69579  USPATFULL
TI      Proteins and nucleic acids encoding same
IN      Kekuda, Ramesh, Danbury, CT, UNITED STATES
        Alsobrook, John P., II, Madison, CT, UNITED STATES
        Tchernev, Velizar T., Branford, CT, UNITED STATES
        Liu, Xiaohong, Branford, CT, UNITED STATES
        Spytek, Kimberly A., New Haven, CT, UNITED STATES
        Patturajan, Meera, Branford, CT, UNITED STATES
        Grosse, William M., Branford, CT, UNITED STATES
        Lepley, Denise M., Branford, CT, UNITED STATES
        Burgess, Catherine E., Wethersfield, CT, UNITED STATES
        Vernet, Corine A.M., Branford, CT, UNITED STATES
        Li, Li, Branford, CT, UNITED STATES
        Gorman, Linda, Branford, CT, UNITED STATES
        Edinger, Shlomit R., New Haven, CT, UNITED STATES
        Sciore, Paul, North Haven, CT, UNITED STATES
        Ellerman, Karen, Branford, CT, UNITED STATES
        Malyankar, Uriel M., Branford, CT, UNITED STATES
        Rothenberg, Mark E., Clinton, CT, UNITED STATES
        Stone, David J., Guilford, CT, UNITED STATES
        Boldog, Ferenc L., North Haven, CT, UNITED STATES
        Guo, Xiaojia (Sasha), Branford, CT, UNITED STATES
        Shenoy, Suresh G., Branford, CT, UNITED STATES
        Anderson, David W., Branford, CT, UNITED STATES
        Padigaru, Muralidhara, Branford, CT, UNITED STATES
        Taupier, Raymond J., JR., East Haven, CT, UNITED STATES
        Miller, Charles E., Guilford, CT, UNITED STATES
        Eisen, Andrew, Rockville, MD, UNITED STATES
PI      US 2004052806      A1   20040318
AI      US 2002-37417      A1   20020104 (10)
PRAI    US 2001-260018P     20010105 (60)
        US 2001-260360P     20010108 (60)
        US 2001-272411P     20010228 (60)
        US 2001-272817P     20010302 (60)
        US 2001-291186P     20010515 (60)
        US 2001-303231P     20010705 (60)
        US 2001-305060P     20010712 (60)
        US 2001-318405P     20010910 (60)
        US 2001-318700P     20010912 (60)
DT      Utility
FS      APPLICATION
LN.CNT 13212
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INCL INCLM: 424/185.100
INCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000; 536/023.200
NCL NCLM: 424/185.100
NCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000; 536/023.200
IC [7]
ICM: C07H021-04
ICS: C12N009-00; A61K039-00; C12P021-02; C12N005-06; C07K014-47
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 7 OF 104 USPATFULL on STN
AN 2004:63731 USPATFULL
TI Novel nucleic acids and secreted polypeptides
IN Tang, Y. Tom, San Jose, CA, UNITED STATES
Yang, Yonghong, San Jose, CA, UNITED STATES
Weng, Gezhi, Piedmont, CA, UNITED STATES
Zhang, Jie, Campbell, CA, UNITED STATES
Ren, Feiyan, Cupertino, CA, UNITED STATES
Xue, Aidong, Sunnyvale, CA, UNITED STATES
Wang, Jian-Rui, Cupertino, CA, UNITED STATES
Wehrman, Tom, Stanford, CA, UNITED STATES
Ghosh, Malabika J., Sunnyvale, CA, UNITED STATES
Wang, Dunrui, Poway, CA, UNITED STATES
Zhao, Qing A., San Jose, CA, UNITED STATES
Wang, Zhiwei, Sunnyvale, CA, UNITED STATES
PI US 2004048249 A1 20040311
AI US 2002-112944 A1 20020328 (10)
RLI Continuation-in-part of Ser. No. US 2000-488725, filed on 21 Jan 2000, PENDING Continuation-in-part of Ser. No. US 2000-491404, filed on 25 Jan 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-496914, filed on 3 Feb 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-515126, filed on 28 Feb 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-519705, filed on 7 Mar 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-540217, filed on 31 Mar 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-552929, filed on 18 Apr 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-577408, filed on 18 May 2000, ABANDONED
PRAI US 2001-306971P 20010721 (60)
DT Utility
FS APPLICATION
LN.CNT 23809
INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 435/455.000; 530/350.000; 536/023.200
NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 435/455.000; 530/350.000; 536/023.200
IC [7]
ICM: C12Q001-68
ICS: C07H021-04; C12N009-00; C12P021-02; C12N005-06; C07K014-47; C12N015-85
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 8 OF 104 USPATFULL on STN
AN 2004:63727 USPATFULL
TI Novel human proteins, polynucleotides encoding them and methods of using the same
IN Shimkets, Richard A., West Haven, CT, UNITED STATES
Taupier, Raymond J., JR., East Haven, CT, UNITED STATES
Burgess, Catherine E., Wethersfield, CT, UNITED STATES
Zerhusen, Bryan D., Branford, CT, UNITED STATES
Mezes, Peter S., Old Lyme, CT, UNITED STATES
Rastelli, Luca, Guilford, CT, UNITED STATES
Malyankar, Uriel M., Branford, CT, UNITED STATES
Grosse, William M., Branford, CT, UNITED STATES
Alsobrook, John P., II, Madison, CT, UNITED STATES
Lepley, Denise M., Branford, CT, UNITED STATES
Spytek, Kimberly Ann, New Haven, CT, UNITED STATES
Li, Li, Cheshire, CT, UNITED STATES
Edinger, Shlomit, New Haven, CT, UNITED STATES
Gerlach, Valerie, Branford, CT, UNITED STATES
Ellerman, Karen, Branford, CT, UNITED STATES
MacDougall, John R., Hamden, CT, UNITED STATES
Gunther, Erik, UNITED STATES
Millet, Isabelle, Milford, CT, UNITED STATES

Stone, David J., Guilford, CT, UNITED STATES
Smithson, Glennda, Guilford, CT, UNITED STATES
Szekeres, Edward S., JR., Branford, CT, UNITED STATES
PI US 2004048245 A1 20040311
AI US 2001-972211 A1 20011005 (9)
PRAI US 2000-238325P 20001005 (60)
US 2000-238323P 20001005 (60)
US 2000-238400P 20001006 (60)
US 2000-238397P 20001006 (60)
US 2000-238401P 20001006 (60)
US 2000-238379P 20001006 (60)
US 2000-238402P 20001006 (60)
US 2000-238384P 20001006 (60)
US 2000-238373P 20001006 (60)
US 2000-238372P 20001006 (60)
US 2000-238383P 20001006 (60)
US 2000-238382P 20001006 (60)
US 2001-275892P 20010314 (60)
US 2001-296860P 20010608 (60)
DT Utility
FS APPLICATION
LN.CNT 8458
INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/325.000; 435/320.100; 530/388.260; 536/023.200; 435/183.000
NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/325.000; 435/320.100; 530/388.260; 536/023.200; 435/183.000
IC [7]
ICM: C12Q001-68
ICS: C07H021-04; C12N009-00; C07K016-40; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 9 OF 104 USPATFULL on STN
AN 2004:58174 USPATFULL
TI Novel nucleic acids and polypeptides
IN Tang, Y. Tom, San Jose, CA, UNITED STATES
Liu, Chenghua, San Jose, CA, UNITED STATES
Asundi, Vinod, Foster City, CA, UNITED STATES
Wehrman, Tom, Stanford, CA, UNITED STATES
Ren, Feiyan, Cupertino, CA, UNITED STATES
Zhou, Ping, Cupertino, CA, UNITED STATES
Zhao, Qing A., San Jose, CA, UNITED STATES
Drmanac, Radoje T., Palo Alto, CA, UNITED STATES
Zhang, Jie, Campbell, CA, UNITED STATES
Xue, Aidong, Sunnyvale, CA, UNITED STATES
Wang, Jian-Rui, Cupertino, CA, UNITED STATES
Wang, Dunrui, Poway, CA, UNITED STATES
PI US 2004044181 A1 20040304
AI US 2003-363616 A1 20030715 (10)
WO 2001-US27093 20010831
DT Utility
FS APPLICATION
LN.CNT 17667
INCL INCLM: 530/350.000
INCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.500
NCL NCLM: 530/350.000
NCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.500
IC [7]
ICM: C07K014-705
ICS: C12P021-02; C12N005-06; C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 104 USPATFULL on STN
AN 2004:44503 USPATFULL
TI Methods of diagnosis of angiogenesis, compositions and methods of screening for angiogenesis modulators
IN Murray, Richard, Cupertino, CA, UNITED STATES
Glynne, Richard, Palo Alto, CA, UNITED STATES
Watson, Susan R., El Cerrito, CA, UNITED STATES
Aziz, Natasha, Palo Alto, CA, UNITED STATES
PA Eos Biotechnology, Inc., South San Francisco, CA, UNITED STATES, 94080 (U.S. corporation)
PI US 2004033495 A1 20040219
AI US 2002-211462 A1 20020801 (10)
PRAI US 2001-310025P 20010803 (60)

US 2001-334244P 20011129 (60)
DT Utility
FS APPLICATION
LN.CNT 24599
INCL INCLM: 435/006.000
INCLS: 435/007.230; 435/069.100; 435/320.100; 435/325.000; 536/023.200
NCL NCLM: 435/006.000
NCLS: 435/007.230; 435/069.100; 435/320.100; 435/325.000; 536/023.200
IC [7]
ICM: C12Q001-68
ICS: G01N033-574; C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 104 USPATFULL on STN
AN 2004:38683 USPATFULL
TI Proteins and nucleic acids encoding same
IN Edinger, Shlomit R., New Haven, CT, UNITED STATES
MacDougall, John R., Hamden, CT, UNITED STATES
Millet, Isabelle, Milford, CT, UNITED STATES
Ellerman, Karen, Branford, CT, UNITED STATES
Stone, David J., Guilford, CT, UNITED STATES
Gerlach, Valerie, Branford, CT, UNITED STATES
Grosse, William M., Branford, CT, UNITED STATES
Alsobrook, John P., II, Madison, CT, UNITED STATES
Lepley, Denise M., Branford, CT, UNITED STATES
Rieger, Danier K., Branford, CT, UNITED STATES
Burgess, Catherine E., Wethersfield, CT, UNITED STATES
Casman, Stacie J., North Haven, CT, UNITED STATES
Spytek, Kimberly A., New Haven, CT, UNITED STATES
Boldog, Ference L., North Haven, CT, UNITED STATES
Li, Li, Branford, CT, UNITED STATES
Padigaru, Muralidhara, Branford, CT, UNITED STATES
Mishra, Vishnu, Gainesville, FL, UNITED STATES
Patturajan, Meera, Branford, CT, UNITED STATES
Shenoy, Suresh G., Branford, CT, UNITED STATES
Rastelli, Luca, Guilford, CT, UNITED STATES
Tchernev, Velizar T., Branford, CT, UNITED STATES
Vernet, Corine A.M., Branford, CT, UNITED STATES
Zerhusen, Bryan D., Branford, CT, UNITED STATES
Malyankar, Uriel M., Branford, CT, UNITED STATES
Guo, Xiaojia (Sasha), Branford, CT, UNITED STATES
Miller, Charles E., Guilford, CT, UNITED STATES
Gangolli, Esha A., Madison, CT, UNITED STATES
Grosse, Michael, UNITED STATES LR
PI US 2004029222 A1 20040212
AI US 2002-218779 A1 20020814 (10)
RLI Continuation of Ser. No. US 2001-995514, filed on 28 Nov 2001, ABANDONED
PRAI US 2000-253834P 20001129 (60)
US 2000-250926P 20001130 (60)
US 2001-264180P 20010125 (60)
US 2001-313656P 20010820 (60)
US 2001-327456P 20011005 (60)
DT Utility
FS APPLICATION
LN.CNT 15385
INCL INCLM: 435/069.100
INCLS: 435/183.000; 435/320.100; 435/325.000; 530/350.000; 536/023.200; 530/388.100; 435/007.230; 435/006.000
NCL NCLM: 435/069.100
NCLS: 435/183.000; 435/320.100; 435/325.000; 530/350.000; 536/023.200; 530/388.100; 435/007.230; 435/006.000
IC [7]
ICM: C12Q001-68
ICS: G01N033-574; C07H021-04; C12N009-00; C12P021-02; C12N005-06; C07K014-47; C07K016-30
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 104 USPATFULL on STN
AN 2004:38577 USPATFULL
TI Proteins and nucleic acids encoding same
IN Edinger, Shlomit R., New Haven, CT, UNITED STATES
MacDougall, John R., Hamden, CT, UNITED STATES
Millet, Isabelle, Milford, CT, UNITED STATES
Ellerman, Karen, Branford, CT, UNITED STATES
Stone, David J., Guilford, CT, UNITED STATES
Gerlach, Valerie, Branford, CT, UNITED STATES

Grosse, William M., Branford, CT, UNITED STATES
Alsobrook, John P., II, Madison, CT, UNITED STATES
Lepley, Denise M., Branford, CT, UNITED STATES
Rieger, Daniel K., Branford, CT, UNITED STATES
Burgess, Catherine E., Wethersfield, CT, UNITED STATES
Casman, Stacie J., North Haven, CT, UNITED STATES
Spytek, Kimberly A., New Haven, CT, UNITED STATES
Boldog, Ferenc L., North Haven, CT, UNITED STATES
Li, Li, Branford, CT, UNITED STATES
Padigaru, Muralidhara, Branford, CT, UNITED STATES
Mishra, Vishnu, Gainesville, FL, UNITED STATES
Patturajan, Meera, Branford, CT, UNITED STATES
Shenoy, Suresh G., Branford, CT, UNITED STATES
Rastelli, Luca, Guilford, CT, UNITED STATES
Tchernev, Velizar T., Branford, CT, UNITED STATES
Vernet, Corine A.M., Branford, CT, UNITED STATES
Zerhusen, Bryan D., Branford, CT, UNITED STATES
Malyankar, Uriel M., Branford, CT, UNITED STATES
Guo, Xiaojia, Branford, CT, UNITED STATES
Miller, Charles E., Guilford, CT, UNITED STATES
Gangolli, Esha A., Madison, CT, UNITED STATES
PI US 2004029116 A1 20040212
AI US 2002-87684 A1 20020301 (10)
PRAI US 2001-313656P 20010820 (60)
US 2001-274194P 20010308 (60)
US 2001-327456P 20011005 (60)
DT Utility
FS APPLICATION
LN.CNT 15489
INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000; 536/023.200
NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000; 536/023.200
IC [7]
ICM: C12Q001-68
ICS: C07H021-04; C12N009-00; C12P021-02; C12N005-06; C07K014-47
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 13 OF 104 USPATFULL on STN
AN 2004:31106 USPATFULL
TI Receptors
IN Griffin, Jennifer A, Fremont, CA, UNITED STATES
Kallick, Deborah A, Galveston, TX, UNITED STATES
Tribouley, Catherine M, San Francisco, CA, UNITED STATES
Yue, Henry, Sunnyvale, CA, UNITED STATES
Nguyen, Danniel B, San Jose, CA, UNITED STATES
Tang, Y Tom, San Jose, CA, UNITED STATES
Lal, Preeti G, Santa Clara, CA, UNITED STATES
Policky, Jennifer L., San Jose, CA, UNITED STATES
Azimzai, Yalda, Oakland, CA, UNITED STATES
Lu, Dyung Aina M, San Jose, CA, UNITED STATES
Graul, Richard C, San Francisco, CA, UNITED STATES
Yao, Monique G, Carmel, IN, UNITED STATES
Burford, Neil, Durham, CT, UNITED STATES
Hafalia, April J A, Daly City, CA, UNITED STATES
Baughn, Mariah R, San Leandro, CA, UNITED STATES
Bandman, Olga, Mountain View, CA, UNITED STATES
Arvizu, Chandra S, San Jose, CA, UNITED STATES
Xu, Yuming, Mountain View, CA, UNITED STATES
Gandhi, Ameena R, San Francisco, CA, UNITED STATES
Warren, Bridget A, Encinitas, CA, UNITED STATES
Ding, Li, Creve Coeur, MO, UNITED STATES
Sanjanwala, Madhusudan M, Los Altos, CA, UNITED STATES
Duggan, Brendan M, Sunnyvale, CA, UNITED STATES
Lu, Yan, Mountain View, CA, UNITED STATES
Yang, Junming, San Jose, CA, UNITED STATES
PI US 2004023244 A1 20040205
AI US 2003-311623 A1 20030516 (10)
WO 2001-US19942 20010621
DT Utility
FS APPLICATION
LN.CNT 8061
INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000

NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000
IC [7]
ICM: C12Q001-68
ICS: C12N009-00; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 14 OF 104 USPATFULL on STN
AN 2004:18871 USPATFULL
TI Novel polynucleotides, polypeptides encoded thereby and methods of use thereof
IN Anderson, David W., Plantsville, CT, UNITED STATES
Boldog, Ferenc L., North Haven, CT, UNITED STATES
Casman, Stacie J., North Haven, CT, UNITED STATES
Edinger, Shlomit R., New Haven, CT, UNITED STATES
Ellerman, Karen, Branford, CT, UNITED STATES
Fernandes, Elma R., Branford, CT, UNITED STATES
Gunther, Erik, Branford, CT, UNITED STATES
Leach, Martin D., Madison, CT, UNITED STATES
MacDougall, John R., Hamden, CT, UNITED STATES
Padigaru, Muralidhara, Branford, CT, UNITED STATES
Shimkets, Richard A., Guilford, CT, UNITED STATES
Smithson, Glennda, Guilford, CT, UNITED STATES
Spytek, Kimberly A., Ellington, CT, UNITED STATES
PI US 2004014173 A1 20040122
AI US 2003-384974 A1 20030310 (10)
RLI Continuation of Ser. No. US 2002-81407, filed on 21 Feb 2002, ABANDONED Continuation-in-part of Ser. No. US 2000-569269, filed on 11 May 2000, PENDING
PRAI US 1999-134315P 19990514 (60)
US 2000-175744P 20000112 (60)
US 2000-188274P 20000310 (60)
DT Utility
FS APPLICATION
LN.CNT 8899
INCL INCLM: 435/069.100
INCLS: 435/006.000; 435/320.100; 435/325.000; 530/350.000; 530/388.220; 514/012.000; 536/023.500
NCL NCLM: 435/069.100
NCLS: 435/006.000; 435/320.100; 435/325.000; 530/350.000; 530/388.220; 514/012.000; 536/023.500
IC [7]
ICM: C12Q001-68
ICS: A61K038-17; C07H021-04; C12P021-02; C12N005-06; C07K014-705; C07K016-28
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 15 OF 104 USPATFULL on STN
AN 2004:18738 USPATFULL
TI Cardiotoxin molecular toxicology modeling
IN Mendrick, Donna, Gaithersburg, MD, UNITED STATES
Porter, Mark, Gaithersburg, MD, UNITED STATES
Johnson, Kory, Gaithersburg, MD, UNITED STATES
Higgs, Brandon, Gaithersburg, MD, UNITED STATES
Castle, Arthur, Gaithersburg, MD, UNITED STATES
Elashoff, Michael, Gaithersburg, MD, UNITED STATES
PI US 2004014040 A1 20040122
AI US 2002-191803 A1 20020710 (10)
PRAI US 2001-303819P 20010710 (60)
US 2001-305623P 20010717 (60)
US 2002-369351P 20020403 (60)
US 2002-377611P 20020506 (60)
DT Utility
FS APPLICATION
LN.CNT 15812
INCL INCLM: 435/006.000
INCLS: 702/020.000
NCL NCLM: 435/006.000
NCLS: 702/020.000
IC [7]
ICM: C12Q001-68
ICS: G06F019-00; G01N033-48; G01N033-50
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 16 OF 104 USPATFULL on STN
AN 2004:18355 USPATFULL

TI Novel nucleic acids and polypeptides
IN Tang, Y. Tom, San Jose, CA, UNITED STATES
Asundi, Vinod, Foster City, CA, UNITED STATES
Wehrman, Tom, Stanford, CA, UNITED STATES
Yang, Yonghong, San Jose, CA, UNITED STATES
Zhang, Jie, Campbell, CA, UNITED STATES
Zhou, Ping, Cupertino, CA, UNITED STATES
Drmanac, Radoje T., Palo Alto, CA, UNITED STATES
Goodrich, Ryle, Los Angeles, CA, UNITED STATES
PI US 2004013657 A1 20040122
AI US 2002-294006 A1 20021112 (10)
RLI Continuation-in-part of Ser. No. WO 2002-US8964, filed on 20 Mar 2002, PENDING Continuation of Ser. No. US 2001-815925, filed on 22 Mar 2001, ABANDONED
DT Utility
FS APPLICATION
LN.CNT 10481
INCL INCLM: 424/094.100
INCLS: 435/006.000; 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000; 536/023.200; 530/388.100
NCL NCLM: 424/094.100
NCLS: 435/006.000; 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000; 536/023.200; 530/388.100
IC [7]
ICM: A61K038-43
ICS: C12Q001-68; C07H021-04; C12N009-00; C12P021-02; C12N005-06; C07K016-40
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 17 OF 104 USPATFULL on STN
AN 2004:7329 USPATFULL
TI Methods of diagnosis of ovarian cancer, compositions and methods of screening for modulators of ovarian cancer
IN Mack, David H., Menlo Park, CA, UNITED STATES
Gish, Kurt C., San Francisco, CA, UNITED STATES
PA Eos Biotechnology, Inc., South San Francisco, CA (U.S. corporation)
PI US 2004005563 A1 20040108
AI US 2002-173999 A1 20020617 (10)
PRAI US 2002-372246P 20020412 (60)
US 2001-350666P 20011113 (60)
US 2001-315287P 20010827 (60)
US 2001-299234P 20010618 (60)
DT Utility
FS APPLICATION
LN.CNT 32540
INCL INCLM: 435/006.000
INCLS: 435/007.230; 435/366.000; 435/183.000; 435/320.100; 435/069.100; 536/023.200
NCL NCLM: 435/006.000
NCLS: 435/007.230; 435/366.000; 435/183.000; 435/320.100; 435/069.100; 536/023.200
IC [7]
ICM: C12Q001-68
ICS: G01N033-574; C07H021-04; C12N009-00; C12P021-02; C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 18 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
AN 2004:535075 CAPLUS
TI Apoptosis initiated by dependence receptors: A new paradigm for cell death?
AU Porter, Alan G.; Dhakshinamoorthy, Saravanakumar
CS Institute of Molecular and Cell Biology, Singapore
SO BioEssays (2004), 26(6), 656-664
CODEN: BIOEEJ; ISSN: 0265-9247
PB John Wiley & Sons, Inc.
DT Journal
LA English

L2 ANSWER 19 OF 104 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 4
AN 10315446 IFIPAT;IFIUDB;IFICDB
TI NETRIN RECEPTORS; VERTEBRATE PROTEIN FOR USE IN HUMAN THERAPEUTIC AND DIAGNOSTICS
IN Hinck Lindsay; Keino-Masu Kazuko; Leonardo E David; Masu Masayuki; Tessier-Lavigne Marc
PA Unassigned Or Assigned To Individual (68000)
PI US 2003059859 A1 20030327

AI  US 2002-256702  20020927
RLI  US 2001-933261  20010820 CONTINUATION  PENDING
FI  US 2003059859  20030327
DT  Utility; Patent Application - First Publication
FS  CHEMICAL
    APPLICATION
CLMN  10

L2  ANSWER 20 OF 104  USPATFULL on STN
AN  2003:330208  USPATFULL
TI  Molecules interacting with CASL (MICAL) polynucleotides, polypeptides, and methods of using the same
IN  Kolodkin, Alex L., Baltimore, MD, UNITED STATES
    Terman, Jon R., Baltimore, MD, UNITED STATES
    Mao, Tiany, Parkville, MD, UNITED STATES
    Pasterkamp, Ronald J., Baltimore, MD, UNITED STATES
    Yu, Hung-Hsiang, Lynnwood, WA, UNITED STATES
PI  US 2003232419  A1  20031218
AI  US 2003-359012  A1  20030204 (10)
PRAI  US 2002-354178P  20020204 (60)
    US 2002-384302P  20020530 (60)
    US 2002-388325P  20020613 (60)
DT  Utility
FS  APPLICATION
LN.CNT 10590
INCL  INCLM: 435/191.000
    INCLS: 435/069.100; 435/320.100; 435/325.000; 530/388.260; 435/006.000; 435/007.200; 536/023.200
NCL  NCLM:  435/191.000
    NCLS:  435/069.100; 435/320.100; 435/325.000; 530/388.260; 435/006.000; 435/007.200; 536/023.200
IC  [7]
    ICM: C12Q001-68
    ICS: G01N033-53; G01N033-567; C12N009-06; C12P021-02; C12N005-06; C07K016-40; C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2  ANSWER 21 OF 104  USPATFULL on STN
AN  2003:289292  USPATFULL
TI  Novel proteins and nucleic acids encoding same and antibodies directed against these proteins
IN  Herrmann, John L., Guilford, CT, UNITED STATES
    Rastelli, Luca, Guilford, CT, UNITED STATES
    Shimkets, Richard A., Guilford, CT, UNITED STATES
PI  US 2003204052  A1  20031030
AI  US 2001-970944  A1  20011004 (9)
PRAI  US 2000-237862P  20001004 (60)
DT  Utility
FS  APPLICATION
LN.CNT 7083
INCL  INCLM: 530/350.000
    INCLS: 435/325.000; 435/320.100; 435/069.100; 536/023.500
NCL  NCLM:  530/350.000
    NCLS:  435/325.000; 435/320.100; 435/069.100; 536/023.500
IC  [7]
    ICM: C07K014-435
    ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2  ANSWER 22 OF 104  USPATFULL on STN
AN  2003:93010  USPATFULL
TI  Novel proteins and nucleic acids encoding same
IN  Taupier, Raymond J., JR., East Haven, CT, UNITED STATES
    Padigaru, Muralidhara, Branford, CT, UNITED STATES
    Rastelli, Luca, Guilford, CT, UNITED STATES
    Spaderna, Steven Kurt, Berlin, CT, UNITED STATES
    Shimkets, Richard A., West Haven, CT, UNITED STATES
    Zerhusen, Bryan D., Branford, CT, UNITED STATES
    Spytek, Kimberly Ann, New Haven, CT, UNITED STATES
    Shenoy, Suresh G., Branford, CT, UNITED STATES
    Li, Li, Cheshire, CT, UNITED STATES
    Gusev, Vladimir Y., Madison, CT, UNITED STATES
    Grosse, William M., Branford, CT, UNITED STATES
    Alsobrook, John P., II, Madison, CT, UNITED STATES
    Lepley, Denise M., Branford, CT, UNITED STATES
    Burgess, Catherine E., Wethersfield, CT, UNITED STATES

Gerlach, Valerie L., Branford, CT, UNITED STATES
Ellerman, Karen, Branford, CT, UNITED STATES
MacDougall, John R., Hamden, CT, UNITED STATES
Stone, David J., Guilford, CT, UNITED STATES
Smithson, Glennda, Guilford, CT, UNITED STATES
PI US 2003064369 A1 20030403
AI US 2001-918779 A1 20010730 (9)
PRAI US 2000-221409P 20000728 (60)
US 2000-222840P 20000804 (60)
US 2000-223752P 20000808 (60)
US 2000-223762P 20000808 (60)
US 2000-223770P 20000808 (60)
US 2000-223769P 20000808 (60)
US 2000-225146P 20000814 (60)
US 2000-225392P 20000815 (60)
US 2000-225470P 20000815 (60)
US 2000-225697P 20000816 (60)
US 2001-263662P 20010201 (60)
US 2001-281645P 20010405 (60)
DT Utility
FS APPLICATION
LN.CNT 11094
INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/325.000; 435/320.100; 435/183.000; 530/350.000; 536/023.200
NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/325.000; 435/320.100; 435/183.000; 530/350.000; 536/023.200
IC [7]
ICM: C12Q001-68
ICS: C07H021-04; C12N009-00; C07K014-435; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 23 OF 104 USPATFULL on STN
AN 2003:57482 USPATFULL
TI Netrin receptors
IN Tessier-Lavigne, Marc, San Francisco, CA, UNITED STATES
Leonardo, E. David, San Francisco, CA, UNITED STATES
Hinck, Lindsay, San Francisco, CA, UNITED STATES
Masu, Masayuki, San Francisco, CA, UNITED STATES
Keino-Masu, Kazuko, San Francisco, CA, UNITED STATES
PI US 2003040046 A1 20030227
AI US 2001-933261 A1 20010820 (9)
RLI Division of Ser. No. US 1999-306902, filed on 7 May 1999, GRANTED, Pat. No. US 6277585 Division of Ser. No. US 1997-808982, filed on 19 Feb 1997, GRANTED, Pat. No. US 5939271
DT Utility
FS APPLICATION
LN.CNT 1121
INCL INCLM: 435/069.100
INCLS: 435/007.100; 435/320.100; 435/325.000; 530/350.000; 536/023.500
NCL NCLM: 435/069.100
NCLS: 435/007.100; 435/320.100; 435/325.000; 530/350.000; 536/023.500
IC [7]
ICM: C07K014-705
ICS: G01N033-53; C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 24 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 5
AN 2003:482322 BIOSIS
DN PREV200300482322
TI Netrin binds discrete subdomains of DCC and ***UNC5*** and mediates interactions between DCC and heparin.
AU Geisbrecht, Brian V.; Dowd, Kimberly A.; Barfield, Ronald W.; Longo, Patti A.; Leahy, Daniel J. [Reprint Author]
CS Dept. of Biophysics and Biophysical Chemistry, Howard Hughes Medical Institute, Johns Hopkins University School of Medicine, 725 N. Wolfe St., Baltimore, MD, 21205, USA
dleahy@jhmi.edu
SO Journal of Biological Chemistry, (August 29 2003) Vol. 278, No. 35, pp. 32561-32568. print.
CODEN: JBCHA3. ISSN: 0021-9258.
DT Article
LA English
ED Entered STN: 15 Oct 2003

Last Updated on STN: 15 Oct 2003

L2 ANSWER 25 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 6
AN 2003:281750 BIOSIS
DN PREV200300281750
TI Netrin 1 mediates spinal cord oligodendrocyte precursor dispersal.
AU Tsai, Hui-Hsin; Tessier-Lavigne, Marc; Miller, Robert H. [Reprint Author]
CS Department of Neurosciences, School of Medicine, Case Western Reserve University, Cleveland, OH, 44106, USA
rhm3@po.cwru.edu
SO Development (Cambridge), (May 2003) Vol. 130, No. 10, pp. 2095-2105. print.
CODEN: DEVPED. ISSN: 0950-1991.
DT Article
LA English
ED Entered STN: 19 Jun 2003
Last Updated on STN: 19 Jun 2003

L2 ANSWER 26 OF 104 AQUASCI COPYRIGHT 2004 FAO (On behalf of the ASFA Advisory Board). All rights reserved. on STN DUPLICATE 7
AN 2003:49785 AQUASCI
DN ASFA1 2003
TI Cyclic AMP/GMP-dependent modulation of Ca2+ channels sets the polarity of nerve growth-cone turning
AU Nishiyama, M.; Hoshino, A.; Tsai, L.; Henley, J.R.; Goshima, Y.; Tessier-Lavigne, M.; Poo, M.; Hong, K.
CS Department of Biochemistry, New York University School of Medicine, New York, New York 10016-6402, USA
SO Nature, (20030626) vol. 423, no. 6943, pp. 990-995.
ISSN: 0028-0836.
DT Journal
FS ASFA1
LA English
SL English

L2 ANSWER 27 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:447021 CAPLUS
DN 139:114683
TI Unwrapping glial biology: Gcm target genes regulating glial development, diversification, and function
AU Freeman, Marc R.; Delrow, Jeffrey; Kim, Junhyong; Johnson, Eric; Doe, Chris Q.
CS Institutes of Neuroscience and Molecular Biology, University of Oregon, Eugene, OR, 97403, USA
SO Neuron (2003), 38(4), 567-580
CODEN: NERNET; ISSN: 0896-6273
PB Cell Press
DT Journal
LA English
RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 28 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 8
AN 2003:450358 BIOSIS
DN PREV200300450358
TI Characterization of Netrin-1, Neogenin and cUNC-5H3 expression during chick dorsal root ganglia development.
AU Guan, Wei; Condic, Maureen L. [Reprint Author]
CS Interdepartmental Program in Neuroscience, School of Medicine, University of Utah, 20 North, 1900 East, Salt Lake City, UT, 84132-3401, USA
maureen.condic@hsc.utah.edu
SO Gene Expression Patterns, (June 2003) Vol. 3, No. 3, pp. 369-373. print.
ISSN: 1567-133X (ISSN print).
DT Article
LA English
ED Entered STN: 1 Oct 2003
Last Updated on STN: 1 Oct 2003

L2 ANSWER 29 OF 104 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN
DUPLICATE
AN 2003:36076423 BIOTECHNO
TI Quantification of expression of netrins, slits and their receptors in human prostate tumors
AU Latil A.; Chene L.; Cochant-Priollet B.; Mangin P.; Fournier G.; Berthon

P.; Cussenot O.
CS A. Latil, UroGene, 4 rue Pierre Fontaine, F-91058, Evry Cedex, France. E-mail: a.latil@urogene.com
SO International Journal of Cancer, (20 JAN 2003), 103/3 (306-315), 30 reference(s)
CODEN: IJCNAW ISSN: 0020-7136
DT Journal; Article
CY United States
LA English
SL English

L2 ANSWER 30 OF 104 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 2003:780550 SCISEARCH
GA The Genuine Article (R) Number: 717CY
TI Expression of Netrin-1 and its two receptors DCC and UNC5H2 in the developing mouse lung
AU Dalvin S; Anselmo M A; Prodhan P; Komatsuzaki K; Schnitzer J J; Kinane T B (Reprint)
CS Harvard Univ, Massachusetts Gen Hosp Children, Sch Med, Dept Pediat, Pediat Pulm Unit, Boston, MA 02114 USA (Reprint); Harvard Univ, Massachusetts Gen Hosp Children, Sch Med, Pediat Surg Serv, Pediat Surg Res Lab, Boston, MA 02114 USA; Harvard Univ, Massachusetts Gen Hosp Children, Sch Med, Dept Surg, Boston, MA 02114 USA
CYA USA
SO GENE EXPRESSION PATTERNS, (JUN 2003) Vol. 3, No. 3, pp. 279-283. Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.
ISSN: 1567-133X.
DT Article; Journal
LA English
REC Reference Count: 20
*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*

L2 ANSWER 31 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:165855 CAPLUS
DN 140:403634
TI Axon guidance at the Drosophila midline: genetic analysis of downstream signaling molecules in UNC-5 pathway
AU Kim, Sang W.; Ho, Theresa; Goodman, Corey S.
CS Department of Molecular and Cell Biology, College of Letters and Science, University of California at Berkeley, USA
SO Berkeley Scientific (2003), 7(2), 123-128
CODEN: BESCF6; ISSN: 1097-0967
PB Berkeley Scientific
DT Journal
LA English
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 32 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2004:201260 BIOSIS
DN PREV200400201818
TI cAMP/cGMP - dependent modulation of calcium channels sets the polarity of nerve growth cone turning.
AU Hoshino, A. [Reprint Author]; Nishiyama, M. [Reprint Author]; Tsai, L. [Reprint Author]; Henley, J. R.; Goshima, Y.; Tessier-Lavigne, M.; Poo, M.; Hong, K. [Reprint Author]
CS BioChem., NYU Sch. of Med., New York, NY, USA
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2003) Vol. 2003, pp. Abstract No. 566.8. http://sfn.scholarone.com. e-file. Meeting Info.: 33rd Annual Meeting of the Society of Neuroscience. New Orleans, LA, USA. November 08-12, 2003. Society of Neuroscience.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 14 Apr 2004
Last Updated on STN: 14 Apr 2004

L2 ANSWER 33 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:424280 CAPLUS
DN 139:162215
TI Analysis of the roles of Drosophila netrin receptors frazzled and ***unc5*** in axon guidance
AU Ho, Theresa Wei-Yuan
CS Univ. of California, Berkeley, CA, USA
SO (2002) 160 pp. Avail.: UMI, Order No. DA3063407

From: Diss. Abstr. Int., B 2003, 63(9), 4069
DT Dissertation
LA English

L2 ANSWER 34 OF 104 DISSABS COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved on STN
AN 2003:25417 DISSABS Order Number: AAI3063407
TI Analysis of the roles of Drosophila netrin receptors frazzled and ***Unc5*** in axon guidance
AU Ho, Theresa Wei-Yuan [Ph.D.]; Goodman, Corey S. [adviser]
CS University of California, Berkeley (0028)
SO Dissertation Abstracts International, (2002) Vol. 63, No. 9B, p. 4069. Order No.: AAI3063407. 160 pages.
ISBN: 0-493-82268-2.
DT Dissertation
FS DAI
LA English

L2 ANSWER 35 OF 104 DISSABS COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved on STN
AN 2003:15097 DISSABS Order Number: AAIMQ68785
TI Phosphopeptide mapping of axon guidance molecules by Nano-ESI tandem mass spectrometry
AU Binns, Kathleen Leslie [M.Sc.]; Pawson, Anthony J. [adviser]
CS University of Toronto (Canada) (0779)
SO Masters Abstracts International, (2002) Vol. 41, No. 1, p. 144. Order No.: AAIMQ68785. 100 pages.
ISBN: 0-612-68785-6.
DT Dissertation
FS MAI
LA English

L2 ANSWER 36 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:276161 CAPLUS
DN 136:305202
TI Protein and cDNA sequences of novel human NOV proteins and their use in diagnosis and disease treatment
IN Shimkets, Richard A.; Taupier, Raymond J., Jr.; Burgess, Catherine E.; Zerhusen, Bryan D.; Mezes, Peter S.; Rastelli, Luca; Malyankar, Uriel M.; Grosse, William M.; Alsobrook, John P., II; Lepley, Denise M.; Spytek, Kimberly Ann; Li, Li; Edinger, Shlomit; Gerlach, Valerie; Ellerman, Karen; Macdougall, John; Gunther, Erik; Millet, Isabelle; Stone, David; Smithson, Glennda; Szekeres, Edward S., Jr.
PA Curagen Corporation, USA
SO PCT Int. Appl., 316 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2002029058 | A2 | 20020411 | WO 2001-US31248 | 20011005 |
| | WO 2002029058 | A3 | 20030619 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 2001096649 | A5 | 20020422 | AU 2001-96649 | 20011005 |
| | EP 1349930 | A2 | 20031008 | EP 2001-977537 | 20011005 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| PRAI | US 2000-238323P | P | 20001005 | | |
| | US 2000-238325P | P | 20001005 | | |
| | US 2000-238372P | P | 20001006 | | |
| | US 2000-238373P | P | 20001006 | | |
| | US 2000-238379P | P | 20001006 | | |
| | US 2000-238382P | P | 20001006 | | |
| | US 2000-238383P | P | 20001006 | | |
| | US 2000-238384P | P | 20001006 | | |
| | US 2000-238397P | P | 20001006 | | |
| | US 2000-238400P | P | 20001006 | | |

US 2000-238401P P 20001006
US 2000-238402P P 20001006
US 2001-275892P P 20010314
US 2001-296860P P 20010608
WO 2001-US31248 W 20011005

L2 ANSWER 37 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 10
AN 2003:13649 BIOSIS
DN PREV200300013649
TI Cloning of three mouse ***Unc5*** genes and their expression patterns at mid-gestation.
AU Engelkamp, Dieter [Reprint Author]
CS Max Planck Institute for Brain Research, Deutschordenstrasse 46, 60528, Frankfurt, Germany
engelkamp@mpih-frankfurt.mpg.de
SO Mechanisms of Development, (October 2002) Vol. 118, No. 1-2, pp. 191-197. print.
CODEN: MEDVE6. ISSN: 0925-4773.
DT Article
LA English
ED Entered STN: 25 Dec 2002
Last Updated on STN: 25 Dec 2002

L2 ANSWER 38 OF 104 Elsevier BIOBASE COPYRIGHT 2004 Elsevier Science B.V. on STN DUPLICATE
AN 2002166492 ESBIOBASE
TI Isthmin is a novel secreted protein expressed as part of the Fgf-8 synexpression group in the Xenopus midbrain-hindbrain organizer
AU Pera E.M.; Kim J.I.; Martinez S.L.; Brechner M.; Li S.-Y.; Wessely O.; De Robertis E.M.
CS E.M. De Robertis, Howard Hughes Medical Institute, Department of Biological Chemistry, University of California, Los Angeles, CA 90095-1662, United States.
E-mail: derobert@hhmi.ucla.edu
SO Mechanisms of Development, (2002), 116/1-2 (169-172), 17 reference(s)
CODEN: MEDVE6 ISSN: 0925-4773
PUI S0925477302001235
DT Journal; Article
CY Ireland
LA English
SL English

L2 ANSWER 39 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:326122 BIOSIS
DN PREV200300326122
TI THE DIFFERENTIAL EXPRESSION OF NETRIN1 - NEOGENIN/ ***UNC5*** SIGNALS AFFECTS THE AXON FASCICULATIONS OF DIFFERENT SUBTYPES OF DRG NEURONS.
AU Guan, W. [Reprint Author]; Condic, M. L. [Reprint Author]
CS Neurosci Prg, Univ of Utah, Salt Lake City, UT, USA
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002) Vol. 2002, pp. Abstract No. 729.13. http://sfn.scholarone.com. cd-rom.
Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience. Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 16 Jul 2003
Last Updated on STN: 16 Jul 2003

L2 ANSWER 40 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:269569 BIOSIS
DN PREV200300269569
TI NETRIN - 1 IS A CHEMOREPELLENT FOR OLIGODENDROCYTE PRECURSOR CELLS.
AU Jarjour, A. A. [Reprint Author]; Manitt, C. [Reprint Author]; Moore, S. W. [Reprint Author]; Thompson, K. M. [Reprint Author]; Yuh, S. [Reprint Author]; Kennedy, T. E. [Reprint Author]
CS Centre for Neuronal Survival, Montreal Neurological Institute, McGill University, Montreal, PQ, Canada
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002) Vol. 2002, pp. Abstract No. 128.15. http://sfn.scholarone.com. cd-rom.
Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience. Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
DT Conference; (Meeting)
Conference; (Meeting Poster)
Conference; Abstract; (Meeting Abstract)

LA English
ED Entered STN: 11 Jun 2003
Last Updated on STN: 11 Jun 2003

L2 ANSWER 41 OF 104 USPATFULL on STN
AN 2001:136390 USPATFULL
TI Netrin receptors
IN Tessier-Lavigne, Mark, San Francisco, CA, United States
Leonardo, E. David, San Francisco, CA, United States
Hinck, Lindsay, San Francisco, CA, United States
Masu, Masayuki, San Francisco, CA, United States
Keino-Masu, Kazuko, San Francisco, CA, United States
PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
PI US 6277585 B1 20010821
AI US 1999-306902 19990507 (9)
RLI Division of Ser. No. US 1997-808982, filed on 19 Feb 1997, now patented, Pat. No. US 5939271
DT Utility
FS GRANTED
LN.CNT 683
INCL INCLM: 435/007.100
INCLS: 530/350.000
NCL NCLM: 435/007.100
NCLS: 530/350.000
IC [7]
ICM: G01N033-53
ICS: C07K014-435
EXF 530/350; 435/69.1; 435/320.1; 435/325; 435/7.1; 514/12
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 42 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:846304 CAPLUS
DN 136:67377
TI Netrin stimulates tyrosine phosphorylation of the UNC-5 family of netrin receptors and induces Shp2 binding to the RCM cytodomain
AU Tong, Jiefei; Killeen, Marie; Steven, Robert; Binns, Kathleen L.; Culotti, Joseph; Pawson, Tony
CS Program in Molecular Biology and Cancer, Samuel Lunenfeld Research Institute, Mount Sinai Hospital, Toronto, ON, M5G 1X5, Can.
SO Journal of Biological Chemistry (2001), 276(44), 40917-40925
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 43 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 12
AN 2002:26346 BIOSIS
DN PREV200200026346
TI Short- and long-range repulsion by the Drosophila ***Unc5*** Netrin receptor.
AU Keleman, Krystyna; Dickson, Barry J. [Reprint author]
CS Research Institute of Molecular Pathology, Dr. Bohr-Gasse 7, A-1030, Vienna, Austria
dickson@nt.imp.univie.ac.at
SO Neuron, (November 20, 2001) Vol. 32, No. 4, pp. 605-617. print.
ISSN: 0896-6273.
DT Article
LA English
ED Entered STN: 26 Dec 2001
Last Updated on STN: 25 Feb 2002

L2 ANSWER 44 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 13
AN 2001:625029 CAPLUS
DN 137:228104
TI Guidance molecular of axon and its receptor
AU Zhang, Yong; Chen, Chun; Xu, Jinlin; Gu, Jianxin
CS Department of Biological Science and Technology, Shanghai Jiao Tong University, Shanghai, 200240, Peop. Rep. China
SO Shengwu Huaxue Yu Shengwu Wuli Jinzhan (2001), 28(3), 318-321
CODEN: SHYCD4; ISSN: 1000-3282
PB Shengwu Huaxue Yu Shengwu Wuli Jinzhan Bianjibu
DT Journal; General Review

LA Chinese

L2 ANSWER 45 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:861701 CAPLUS
DN 134:26777
TI UNC-5 constructs and screening methods for protein-protein interactions
IN Van Criekinge, Wim; Roelens, Ingele; Bogaert, Thierry; Verwaerde, Phillipe
PA Devgen NV, Belg.
SO PCT Int. Appl., 246 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2000073328 | A2 | 20001207 | WO 2000-EP5108 | 20000602 |
| | WO 2000073328 | A3 | 20010412 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | GB 2352448 | A1 | 20010131 | GB 2000-13412 | 20000601 |
| | GB 2352448 | B2 | 20020327 | | |
| PRAI | GB 1999-12755 | A | 19990601 | | |

L2 ANSWER 46 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 14
AN 2000:369323 BIOSIS
DN PREV200000369323
TI Netrin-1 promotes thalamic axon growth and is required for proper development of the thalamocortical projection.
AU Braisted, Janet E.; Catalano, Susan M.; Stimac, Robert; Kennedy, Timothy E.; Tessier-Lavigne, Marc; Shatz, Carla J.; O'Leary, Dennis D. M. [Reprint author]
CS MNL-0, Salk Institute, 10010 North Torrey Pines Road, La Jolla, CA, 92037, USA
SO Journal of Neuroscience, (August 1, 2000) Vol. 20, No. 15, pp. 5792-5801. print.
CODEN: JNRSDS. ISSN: 0270-6474.
DT Article
LA English
ED Entered STN: 30 Aug 2000
Last Updated on STN: 8 Jan 2002

L2 ANSWER 47 OF 104 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 2000:433785 SCISEARCH
GA The Genuine Article (R) Number: 320NK
TI The thrombospondin type 1 repeat (TSR) superfamily: Diverse proteins with related roles in neuronal development
AU Adams J C; Tucker R P (Reprint)
CS UNIV CALIF DAVIS, DEPT CELL BIOL & HUMAN ANAT, 1 SHIELDS AVE, DAVIS, CA 95616 (Reprint); UNIV CALIF DAVIS, DEPT CELL BIOL & HUMAN ANAT, DAVIS, CA 95616; UNIV COLL LONDON, MRC, MOL CELL BIOL LAB, LONDON, ENGLAND; UNIV COLL LONDON, DEPT BIOCHEM & MOL BIOL, LONDON, ENGLAND
CYA USA; ENGLAND
SO DEVELOPMENTAL DYNAMICS, (JUN 2000) Vol. 218, No. 2, pp. 280-299.
Publisher: WILEY-LISS, DIV JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012.
ISSN: 1058-8388.
DT General Review; Journal
FS LIFE
LA English
REC Reference Count: 180
*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*

L2 ANSWER 48 OF 104 USPATFULL on STN
AN 1999:96222 USPATFULL
TI Netrin receptor
IN Tessier-Lavigne, Mark, San Francisco, CA, United States
Leonardo, E. David, San Francisco, CA, United States
Hinck, Lindsay, San Francisco, CA, United States

Masu, Masayuki, San Francisco, CA, United States
Keino-Masu, Kazuko, San Francisco, CA, United States
PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
PI US 5939271 19990817
AI US 1997-808982 19970219 (8)
DT Utility
FS Granted
LN.CNT 1137
INCL INCLM: 435/007.100
INCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.500
NCL NCLM: 435/007.100
NCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.500
IC [6]
ICM: G01N033-53
ICS: C12N015-12
EXF 536/23.1; 536/23.5; 435/69.1; 435/320.1; 435/325; 435/7.1; 435/7.2; 435/7.21
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 49 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 15
AN 1999:335299 BIOSIS
DN PREV199900335299
TI Netrin-3, a mouse homolog of human NTN2L, is highly expressed in sensory ganglia and shows differential binding to netrin receptors.
AU Wang, Hao; Copeland, Neal G.; Gilbert, Debra J.; Jenkins, Nancy A.; Tessier-Lavigne, Marc [Reprint author]
CS Department of Anatomy, University of California, 513 Parnassus Avenue, Room S-1479, San Francisco, CA, 94143-0452, USA
SO Journal of Neuroscience, (June 15, 1999) Vol. 19, No. 12, pp. 4938-4947. print.
CODEN: JNRSDS. ISSN: 0270-6474.
DT Article
LA English
ED Entered STN: 24 Aug 1999
Last Updated on STN: 24 Aug 1999

L2 ANSWER 50 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 16
AN 1999:317954 BIOSIS
DN PREV199900317954
TI Floor plate and netrin-1 are involved in the migration and survival of inferior olivary neurons.
AU Bloch-Gallego, Evelyne [Reprint author]; Ezan, Frederic; Tessier-Lavigne, Marc; Sotelo, Constantino
CS Institut National de la Sante et de la Recherche Medicale U106, Hopital de la Salpetriere, 75013, Paris, France
SO Journal of Neuroscience, (June 1, 1999) Vol. 19, No. 11, pp. 4407-4420. print.
CODEN: JNRSDS. ISSN: 0270-6474.
DT Article
LA English
ED Entered STN: 17 Aug 1999
Last Updated on STN: 17 Aug 1999

L2 ANSWER 51 OF 104 AQUASCI COPYRIGHT 2004 FAO (On behalf of the ASFA Advisory Board). All rights reserved. on STN DUPLICATE 17
AN 2000:8241 AQUASCI
DN ASFA1 2000
TI A Ligand-Gated Association between Cytoplasmic Domains of ***UNC5*** and DCC Family Receptors Converts Netrin-Induced Growth Cone Attraction to Repulsion
AU Hong, Kyonsoo; Hinck, L.; Nishiyama, Makoto; Poo, Mu-ming; Tessier-Lavigne, M.; Stein, E.
CS Departments of Anatomy and Biochemistry and Biophysics, Howard Hughes Medical Institute, University of California, San Francisco, CA 94143-0452, USA); E-mail: marctl@itsa.ucsf.ed
SO Cell, (19990625) vol. 97, no. 7, pp. 927-941.
ISSN: 0092-8674.
DT Journal
FS ASFA1
LA English
SL English

L2 ANSWER 52 OF 104 LIFESCI COPYRIGHT 2004 CSA on STN

AN 2000:41654 LIFESCI
TI Semaphorin Signaling: A Little Less Per-Plexin
AU Yu, Hung-Hsiang; Kolodkin, A.L.*
CS Department of Neuroscience, Johns Hopkins University, School of Medicine, Baltimore, Maryland 21205, USA; E-mail: Kolodkin@jhmi.edu
SO Neuron, (19990100) vol. 22, no. 1, pp. 11-14.
ISSN: 0896-6273.
DT Journal
TC General Review
FS N3
LA English

L2 ANSWER 53 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:604920 CAPLUS
DN 129:198904
TI Cloning and cDNA sequences of vertebrate netrin receptors
IN Tessier-Lavigne, Marc; Leonardo, E. David; Hinck, Lindsay; Masu, Masayuki; Keino-Masu, Kazuko
PA The Regents of the University of California, USA
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9837085 | A1 | 19980827 | WO 1998-US3143 | 19980219 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 5939271 | A | 19990817 | US 1997-808982 | 19970219 |
| | AU 9861744 | A1 | 19980909 | AU 1998-61744 | 19980219 |
| | AU 718795 | B2 | 20000420 | | |
| | EP 973794 | A1 | 20000126 | EP 1998-906547 | 19980219 |
| | EP 973794 | B1 | 20021016 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2001505062 | T2 | 20010417 | JP 1998-536840 | 19980219 |
| | AT 226216 | E | 20021115 | AT 1998-906547 | 19980219 |
| | PT 973794 | T | 20030331 | PT 1998-906547 | 19980219 |
| | ES 2185146 | T3 | 20030416 | ES 1998-906547 | 19980219 |
| | US 6277585 | B1 | 20010821 | US 1999-306902 | 19990507 |
| | US 2003040046 | A1 | 20030227 | US 2001-933261 | 20010820 |
| | US 2003059859 | A1 | 20030327 | US 2002-256702 | 20020927 |
| | JP 2004121244 | A2 | 20040422 | JP 2003-319186 | 20030911 |
| PRAI | US 1997-808982 | A | 19970219 | | |
| | JP 1998-536840 | A3 | 19980219 | | |
| | WO 1998-US3143 | W | 19980219 | | |
| | US 1999-306902 | A3 | 19990507 | | |
| | US 2001-933261 | A1 | 20010820 | | |

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 54 OF 104 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 18
AN 1998:496155 BIOSIS
DN PREV199800496155
TI Cloning and mapping of the UNC5C gene to human chromosome 4q21-q23.
AU Ackerman, Susan L. [Reprint author]; Knowles, Barbara B.
CS Jackson Lab., Bar Harbor, ME 04609, USA
SO Genomics, (Sept. 1, 1998) Vol. 52, No. 2, pp. 205-208. print.
CODEN: GNMCEP. ISSN: 0888-7543.
DT Article
LA English
OS Genbank-AF055634; EMBL-AF055634
ED Entered STN: 18 Nov 1998
Last Updated on STN: 18 Nov 1998

L2 ANSWER 55 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:146498 CAPLUS
DN 128:268513

TI Suppressors of ectopic UNC-5 growth cone steering identify eight genes involved in axon guidance in Caenorhabditis elegans
AU Colavita, Antonio; Culotti, Joseph G.
CS Samuel Lunenfeld Research Institute, Mt. Sinai Hospital, Toronto, ON, M5G 1X5, Can.
SO Developmental Biology (1998), 194(1), 72-85
CODEN: DEBIAO; ISSN: 0012-1606
PB Academic Press
DT Journal
LA English
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 56 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 19
AN 1997:285166 CAPLUS
DN 127:3728
TI The mouse rostral cerebellar malformation gene encodes an UNC-5-like protein
AU Ackerman, Susan L.; Kozak, Leslie P.; Przyborski, Stefan A.; Rund, Laurie A.; Boyer, Bert B.; Knowles, Barbara B.
CS Jackson Lab., Bar Harbor, ME, 04609, USA
SO Nature (London) (1997), 386(6627), 838-842
CODEN: NATUAS; ISSN: 0028-0836
PB Macmillan Magazines
DT Journal
LA English
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 57 OF 104 USPATFULL on STN
AN 96:33911 USPATFULL
TI Process for preparing foodstuffs based on reformed and cured herring roe
IN Yamamoto, Shoji, Sherwood, Canada
PA Keeping and MacKay Limited (K. & M.), Canada (non-U.S. corporation)
PI US 5510133 19960423
AI US 1994-344678 19941121 (8)
DT Utility
FS Granted
LN.CNT 742
INCL INCLM: 426/272.000
INCLS: 426/092.000; 426/274.000; 426/643.000
NCL NCLM: 426/272.000
NCLS: 426/092.000; 426/274.000; 426/643.000
IC [6]
ICM: A23L001-328
EXF 426/643; 426/274; 426/513; 426/272; 426/418; 426/92

L2 ANSWER 58 OF 104 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:513957 CAPLUS
DN 119:113957
TI Expression of the UNC-5 guidance receptor in the touch neurons of C. elegans steers their axons dorsally
AU Hamelin, Michel; Zhou, Youwen; Su, Ming Wan; Scott, Ian M.; Culotti, Joseph G.
CS Samuel Lunenfeld Res. Inst., Mount Sinai Hosp., Toronto, ON, M5G 1X5, Can.
SO Nature (London, United Kingdom) (1993), 364(6435), 327-30
CODEN: NATUAS; ISSN: 0028-0836
DT Journal
LA English

L2 ANSWER 59 OF 104 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED. on STN
AN 1993-0056619 PASCAL
TIEN UNC-5, a transmembrane protein with immunoglobulin and thrombospondin type 1 domains, guides cell and pioneer axon migrations in C. elegans
AU LEUNG-HAGESTEIJN C.; SPENCE A. M.; STERN B. D.; YOUWEN ZHOU; MING-WAN SU; HEDGECOCK E. M.; CULOTTI J. G.
CS Mount Sinai hosp., Samuel Lunenfeld res. inst., div. molecular immunology neurobiology, Toronto ON M5G 1X5, Canada
SO Cell : (Cambridge), (1992), 71(2), 289-299, refs. 1 p. 3/4
ISSN: 0092-8674 CODEN: CELLB5
DT Journal
BL Analytic
CY United States
LA English
AV INIST-16529, 354000030771050130

L2 ANSWER 60 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ADG42584 protein DGENE
TI New NOVX gene or NOVX-specific antibody, useful for preparing a composition for treating or preventing a NOVX-associated disorder, e.g., cancer.
IN Herrmann J L; Rastelli L; Shimkets R A
PA (HERR-I) HERRMANN J L.
(RAST-I) RASTELLI L.
(SHIM-I) SHIMKETS R A.
PI US 2003204052 A1 20031030 118p
AI US 2001-970944 20011004
PRAI US 2000-237862P 20001004
DT Patent
LA English
OS 2003-900673 [82]
DESC Human transmembrane receptor ***Unc5*** homologue #2.

L2 ANSWER 61 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ADG42582 protein DGENE
TI New NOVX gene or NOVX-specific antibody, useful for preparing a composition for treating or preventing a NOVX-associated disorder, e.g., cancer.
IN Herrmann J L; Rastelli L; Shimkets R A
PA (HERR-I) HERRMANN J L.
(RAST-I) RASTELLI L.
(SHIM-I) SHIMKETS R A.
PI US 2003204052 A1 20031030 118p
AI US 2001-970944 20011004
PRAI US 2000-237862P 20001004
DT Patent
LA English
OS 2003-900673 [82]
DESC Mouse transmembrane receptor ***Unc5*** homologue.

L2 ANSWER 62 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ADG42583 protein DGENE
TI New NOVX gene or NOVX-specific antibody, useful for preparing a composition for treating or preventing a NOVX-associated disorder, e.g., cancer.
IN Herrmann J L; Rastelli L; Shimkets R A
PA (HERR-I) HERRMANN J L.
(RAST-I) RASTELLI L.
(SHIM-I) SHIMKETS R A.
PI US 2003204052 A1 20031030 118p
AI US 2001-970944 20011004
PRAI US 2000-237862P 20001004
DT Patent
LA English
OS 2003-900673 [82]
DESC Human transmembrane receptor ***Unc5*** homologue #1.

L2 ANSWER 63 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABG61795 Protein DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006

US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
CR N-PSDB: ABK92062
DESC Novel ***UNC5*** receptor-like protein.

L2 ANSWER 64 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN AAU79939 Protein DGENE
TI Novel isolated NOVX polypeptide, and encoded polynucleotide, useful for treating cardiomyopathy, atherosclerosis, and cancer -
IN Herrmann J L; Rastelli L; Shimkets R A
PA (CURA-N) CURAGEN CORP.
PI WO 2002029038 A2 20020411 180p
AI WO 2001-US31377 20011004
PRAI US 2000-237862P 20001004
DT Patent
LA English
OS 2002-340104 [37]
CR N-PSDB: ABK49422
DESC Human ***UNC5*** -like protein NOV1.

L2 ANSWER 65 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92105 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, reverse primer #4.

L2 ANSWER 66 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92104 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006

US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, probe #4.

L2 ANSWER 67 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92103 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, forward primer #4.

L2 ANSWER 68 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92102 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, reverse primer #3.

L2 ANSWER 69 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92101 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -

IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, probe #3.

L2 ANSWER 70 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92100 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, forward primer #3.

L2 ANSWER 71 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92099 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006

US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, reverse primer #2.

L2 ANSWER 72 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92098 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, probe #2.

L2 ANSWER 73 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92097 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, forward primer #2.

L2 ANSWER 74 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92096 DNA DGENE

TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
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US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, reverse primer #1.

L2 ANSWER 75 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92095 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006
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US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, probe #1.

L2 ANSWER 76 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92094 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
US 2000-238373P 20001006

US 2000-238379P 20001006
US 2000-238382P 20001006
US 2000-238383P 20001006
US 2000-238384P 20001006
US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
DESC Novel ***UNC5*** receptor-like protein, forward primer #1.

L2 ANSWER 77 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK92062 DNA DGENE
TI Novel isolated polypeptide, designated NOVX, useful for treating or preventing cancer, diabetes, obesity, dyslipidaemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders -
IN Shimkets R A; Taupier R J; Burgess C E; Zerhusen B D; Mezes P S; Rastelli L; Malyankar U M; Grosse W M; Alsobrook J P; Lepley D M; Spytek K A; Li L; Edinger S; Gerlach V; Ellerman K; Macdougall J; Gunther E; Millet I; Stone D; Smithson G; Szekeres E S
PA (CURA-N) CURAGEN CORP.
PI WO 2002029058 A2 20020411 316p
AI WO 2001-US31248 20011005
PRAI US 2000-238323P 20001005
US 2000-238325P 20001005
US 2000-238372P 20001006
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US 2000-238397P 20001006
US 2000-238400P 20001006
US 2000-238401P 20001006
US 2000-238402P 20001006
US 2001-275892P 20010314
US 2001-296860P 20010608
DT Patent
LA English
OS 2002-444103 [47]
CR P-PSDB: ABG61795
DESC DNA encoding novel ***UNC5*** receptor-like protein.

L2 ANSWER 78 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK49430 DNA DGENE
TI Novel isolated NOVX polypeptide, and encoded polynucleotide, useful for treating cardiomyopathy, atherosclerosis, and cancer -
IN Herrmann J L; Rastelli L; Shimkets R A
PA (CURA-N) CURAGEN CORP.
PI WO 2002029038 A2 20020411 180p
AI WO 2001-US31377 20011004
PRAI US 2000-237862P 20001004
DT Patent
LA English
OS 2002-340104 [37]
DESC Human ***UNC5*** -like NOV1 reverse PCR primer Ag1395.

L2 ANSWER 79 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
AN ABK49429 DNA DGENE
TI Novel isolated NOVX polypeptide, and encoded polynucleotide, useful for treating cardiomyopathy, atherosclerosis, and cancer -
IN Herrmann J L; Rastelli L; Shimkets R A
PA (CURA-N) CURAGEN CORP.
PI WO 2002029038 A2 20020411 180p
AI WO 2001-US31377 20011004
PRAI US 2000-237862P 20001004
DT Patent
LA English
OS 2002-340104 [37]
DESC Human ***UNC5*** -like NOV1 probe Ag1395.

L2 ANSWER 80 OF 104 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

AN  ABK49428  DNA  DGENE
TI  Novel isolated NOVX polypeptide, and encoded polynucleotide, useful for treating cardiomyopathy, atherosclerosis, and cancer -
IN  Herrmann J L; Rastelli L; Shimkets R A
PA  (CURA-N)  CURAGEN CORP.
PI  WO 2002029038 A2 20020411  180p
AI  WO 2001-US31377  20011004
PRAI  US 2000-237862P  20001004
DT  Patent
LA  English
OS  2002-340104 [37]
DESC  Human  ***UNC5***  -like NOV1 forward PCR primer Ag1395.

L2  ANSWER 81 OF 104  DGENE  COPYRIGHT 2004 THOMSON DERWENT on STN
AN  ABK49422  DNA  DGENE
TI  Novel isolated NOVX polypeptide, and encoded polynucleotide, useful for treating cardiomyopathy, atherosclerosis, and cancer -
IN  Herrmann J L; Rastelli L; Shimkets R A
PA  (CURA-N)  CURAGEN CORP.
PI  WO 2002029038 A2 20020411  180p
AI  WO 2001-US31377  20011004
PRAI  US 2000-237862P  20001004
DT  Patent
LA  English
OS  2002-340104 [37]
CR  P-PSDB: AAU79939
DESC  DNA encoding human  ***UNC5***  -like protein NOV1.

L2  ANSWER 82 OF 104  FEDRIP COPYRIGHT 2004 NTIS on STN
AN  2004:201922  FEDRIP
NR  CRISP 5R01NS42823-02
TI  Molecular Mechanism of Axon Guidance by Second Messenger
SF  Principal Investigator: HONG, KYONSOO; KYONSOO.HONG@MED.NYU.EDU, NEW YORK UNIVERSITY, 550 FIRST AVENUE
CSP  NEW YORK UNIVERSITY SCHOOL OF MEDICINE, NEW YORK, NEW YORK
CSS  Supported By: NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE
DB  2007 (/15/02)
FYR  2003
DE  2005 (/31/07)
FU  Noncompeting Continuation (Type 5)
FS  National Institutes of Health

L2  ANSWER 83 OF 104  FEDRIP COPYRIGHT 2004 NTIS on STN
AN  2004:200998  FEDRIP
NR  CRISP 5R01NS39572-04
TI  CHEMOREPULSION MEDIATED NETRIN RECEPTORS UNC5H AND DCC
SF  Principal Investigator: HINCK, LINDSAY E; UNIV OF CALIFORNIA SAN FRANCISCO, 513 PARNASSUS AVENUE
CSP  UNIVERSITY OF CALIFORNIA SANTA CRUZ, SANTA CRUZ, CALIFORNIA
CSS  Supported By: NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE
DB  2003 (/09/00)
FYR  2003
DE  2002 (/29/04)
FU  Noncompeting Continuation (Type 5)
FS  National Institutes of Health

L2  ANSWER 84 OF 104  FEDRIP COPYRIGHT 2004 NTIS on STN
AN  2004:176660  FEDRIP
NR  CRISP 5R01GM40613-13
TI  Molecular Genetics of Drosophila Neural Development
SF  Principal Investigator: THOMAS, JOHN B; JTHOMAS@SALK.EDU, SALK INST FOR BIOLOGICAL STUDIES, PO BOX 85800
CSP  SALK INSTITUTE FOR BIOLOGICAL STUDIES, SAN DIEGO, CALIFORNIA
CSS  Supported By: NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES
DB  2004 (/01/90)
FYR  2003
DE  2003 (/31/06)
FU  Noncompeting Continuation (Type 5)
FS  National Institutes of Health

L2  ANSWER 85 OF 104  GENBANK.RTM.  COPYRIGHT 2004 on STN

LOCUS (LOC):  AY510109  GenBank (R)
GenBank ACC. NO. (GBN):  AY510109
GenBank VERSION (VER):  AY510109.1  GI:46095340
CAS REGISTRY NO. (RN):  676382-19-7

SEQUENCE LENGTH (SQL): 1557
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 19 Apr 2004
DEFINITION (DEF): Homo sapiens ZU5 and death domain-containing inhibitor of NF-kB mRNA, complete cds.
SOURCE: Homo sapiens (human)
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
REFERENCE: 1 (bases 1 to 1557)
AUTHOR (AU): Zhang,J.; Xu,L.G.; Han,K.J.; Shu,H.B.
TITLE (TI): Identification of a ZU5 and death domain-containing inhibitor of NF-kappaB
JOURNAL (SO): J. Biol. Chem., 279 (17), 17819-17825 (2004)
REFERENCE: 2 (bases 1 to 1557)
AUTHOR (AU): Zhang,J.; Xu,L.-G.; Han,K.-J.; Shu,H.-B.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (21-DEC-2003) Immunology, National Jewish Center, 1400 Jackson Street, Denver, CO 80206, USA

FEATURES (FEAT):

| Feature Key | Location | Qualifier |
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| source | 1..1557 | /organism="Homo sapiens"<br>/mol-type="mRNA"<br>/db-xref="taxon:9606" |
| CDS | 1..1557 | /note="ZUD"<br>/codon-start=1<br>/product="ZU5 and death domain-containing inhibitor of NF-kB"<br>/protein-id="AAS80165.1"<br>/db-xref="GI:46095341"<br>/translation="MCPQESSFQPSQFLLLVGVP<br>VASVLLLAQCLRWHCPRRLLGACW<br>TLNGQEEPVSQPTPQLENEVSRQHLPATLPEMVA<br>FYQELHTPTQGQTMVRQLMHKLLV<br>FSAREVDHRGGCLMLQDTGISLLIPPGAVAVGRQ<br>ERVSLILVWDLSDAPSLSQAQGLV<br>SPVVACGPHGASFLKPCTLTFKHCAEQPSHARTY<br>SSNTTLLDAKVWRPLGRPGAHASR<br>DECRIHLSHFSLYTCVLEAPVGREARKWLQLAVF<br>CSPLVPGQSHLQLRIYFLNNTPCA<br>LQWALTNEQPHGGRLRGPCQLFDFNGARGDQCLK<br>LTYISEGWENVDDSSCQLVPHLHI<br>WHGKCPFRSFCFRRKAADENEDCSALTNEIIVTM<br>HTFQDGLETKYMEILRFQASEEES<br>WAAPPPVSQPPPCNRLPPELFEQLRMLLEPNSIT<br>GNDWRGLASHLGLCGMKIRFLSCQ<br>RSPAAAILELFEEQNGSLQELHYLMTVMERLDCA<br>SAIQNYLSGTHGGSPGPERGGARD<br>NQGLELDEKL" |
| misc-feature | 322..558 | /note="present in ZO-1 and Unc5-like netrin receptors; Region: ZU5 domain" |
| misc-feature | 1267..1473 | /note="Region: death domain" |

SEQUENCE (SEQ):

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   181 gaaaatgagg tctcaaggca gcacctgcca gccacactgc cagagatggt tgccttctac
   241 caggagctac acacacccac tcaaggccag accatggtcc gccagttgat gcacaaactg
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   661 tgtcgcatcc acctctccca cttcagcctc tacacctgtg tgctggaggc acctgtgggg
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   841 ctgaccaacg agcagcccca tggtgggcgc ctgcgtgggc cctgccagct cttcgacttc
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  1081 accaatgaga tcattgtcac catgcacacc ttccaggatg gcttggagac caagtatatg
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  1201 cagccgcccc catgcaatag gctgccccca gagctctttg agcagctgcg gatgttattg
  1261 gagccaaaca gcatcaccgg caatgactgg cgcggactgg cctcccacct ggggctttgc
  1321 ggcatgaaga tccggttcct gtcctgccag cgcagccccg cagcggccat cctggagttg
  1381 tttgaggagc agaacggcag cctgcaggag ctgcactacc tcatgaccgt catggagcgg
  1441 ctagactgcg cctccgccat ccagaactac ctgagtggga cacacggcgg cagcccaggc
  1501 cccgagcgcg ggggcgcccg ggataaccag ggcctggagc tggacgagaa gctctga
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L2 ANSWER 86 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AY510108 GenBank (R)
GenBank ACC. NO. (GBN): AY510108
GenBank VERSION (VER): AY510108.1 GI:46095338
CAS REGISTRY NO. (RN): 676382-17-5
SEQUENCE LENGTH (SQL): 1557
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Rodents
DATE (DATE): 19 Apr 2004
DEFINITION (DEF): Mus musculus ZU5 and death domain-containing inhibitor of NF-kB mRNA, complete cds.
SOURCE: Mus musculus (house mouse)
ORGANISM (ORGN): Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
REFERENCE: 1 (bases 1 to 1557)
AUTHOR (AU): Zhang,J.; Xu,L.G.; Han,K.J.; Shu,H.B.
TITLE (TI): Identification of a ZU5 and death domain-containing inhibitor of NF-kappaB
JOURNAL (SO): J. Biol. Chem., 279 (17), 17819-17825 (2004)
REFERENCE: 2 (bases 1 to 1557)
AUTHOR (AU): Zhang,J.; Xu,L.-G.; Han,K.-J.; Shu,H.-B.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (21-DEC-2003) Immunology, National Jewish Center, 1400 Jackson Street, Denver, CO 80206, USA

FEATURES (FEAT):

| Feature Key | Location | Qualifier |
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| source | 1..1557 | /organism="Mus musculus"<br>/mol-type="mRNA"<br>/db-xref="taxon:10090"<br>/chromosome="17" |
| CDS | 1..1557 | /note="ZUD"<br>/codon-start=1<br>/product="ZU5 and death domain-containing inhibitor of NF-kB"<br>/protein-id="AAS80164.1"<br>/db-xref="GI:46095339"<br>/translation="MSPQESSVQPSQFLLLVGIP<br>VASALLLAQCLRWHCCQWLPGTCR<br>KLDDPEEPVSPSTPLPEYELPRQCPAPTLPEVAA<br>FYQELHMPTQGQTVTRQMMHKLLV<br>FSAREVDHRGGCLILQDTGISLLIPPGAVTVGRQ<br>ERVSLVLVWDLTDAPSLSHRQGLV<br>SPVVACGPHGASFLKPCTLTFKHCAQQPSQACAY<br>SSNTSLLDAKDWKPLGQPGTHISR<br>DECRILLSHFSLYTCVLEAPLGQTARKWLQLAMF<br>CSPLVPGQTHLQLRVYFLNNTPCA<br>LQWAITNEQPHGGRMRGPCQLFDFTGARADQCLK<br>LKYISEGWENVDDSSSQLVPHLHI<br>WHGKCPFRSFCFRRKAANGNEECSALTNEIIVTM<br>HTFQDGLETKYVEILRFQASEEET<br>WAVPPPVSQPPLCNRLPPELFEQLQMLLEPNSVT<br>GNDWRRLASHLGLCGMKIRVLSCQ<br>RSPAAAILELFEEQNGSLQELHYLMTSMERLDCA<br>SAIQNYLNRSPRGSPDRLHGGTWE<br>NHGLELDEKL" |
| misc-feature | 322..558 | /note="present in ZO-1 and Unc5-like netrin receptors; Region: ZU5 domain" |
| misc-feature | 1264..1473 | /note="Region: death domain" |

SEQUENCE (SEQ):

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     1 atgagccccc aggagagctc tgttcaacct tcccagttcc tcctgttggt ggggatccct
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   121 gggacctgcc ggaagctgga tgatccagag gagccagtgt ccccatccac tccattacca
   181 gagtatgagc tcccgaggca gtgcccagcc cccacactac cggaggtggc tgcgttctac
   241 caggaactcc acatgcctac ccagggccag actgtcaccc gccagatgat gcataagcta
   301 ctggtgtttt ctgctcgaga ggtggatcac cgtggtggat gcctgatcct gcaggacaca
   361 ggcatctccc tgctcatccc gccaggtgct gtgaccgtgg gtcgccagga gagggtgtcc
   421 ttggttctgg tgtgggacct gacagatgcc ccgtcactgt ctcacagaca gggactagtg
   481 agtcctgtgg tggcctgtgg ccctcacggg gcctctttcc tgaagccttg caccctcacg
   541 ttcaagcact gcgcccaaca gcccagtcaa gcatgtgcct acagcagcaa tacctccttg
   601 ctggatgcca aggactggaa acccctgggt cagccgggga ctcatatctc cagggacgag
   661 tgtcgtatcc tgctctctca cttcagtctc tacacctgcg ttctggaggc ccccctgggc
   721 cagacagccc gcaagtggct gcagctggcc atgttctgct ccccactggt gccagggcag
   781 acacacctgc agctgcgcgt ctacttcctg aacaacactc cctgcgccct gcagtgggct
   841 atcaccaatg aacagccgca cgggggacgc atgcgcgggc cgtgccagct cttcgacttc
   901 actggggcca gagcagacca gtgcctgaag ctcaagtaca tctctgaggg ttgggagaat
   961 gtggatgata gcagtagcca gctggttcca catctccaca tctggcatgg aaagtgcccc
  1021 ttccgttctt tctgcttccg gagaaaggca gccaatggga atgaagagtg ctcggcatta
  1081 accaatgaga tcattgtcac catgcacacc ttccaggatg gcttggaaac caaatacgtt
  1141 gaaatcctca gattccaggc atcggaggaa gagacctggg cagtgccccc tcctgtctcc
  1201 cagccacccc tgtgcaacag gctgccccca gagctctttg agcagctgca gatgttgttg
  1261 gagcccaaca gtgtcactgg gaatgactgg cgcagactgg cctcccacct gggtctctgt
  1321 ggcatgaaaa tccgggtctt gtcctgccag cgcagtcccg ccgcggccat tctggaattg
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L2 ANSWER 87 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BC057560 GenBank (R)
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CAS REGISTRY NO. (RN): 588653-90-1
SEQUENCE LENGTH (SQL): 3672
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Rodents
DATE (DATE): 21 Oct 2003
DEFINITION (DEF): Mus musculus unc-5 homolog B (C. elegans), mRNA (cDNA clone MGC:66787 IMAGE:6417563), complete cds.
KEYWORDS (ST): MGC
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ORGANISM (ORGN): Mus musculus
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NUCLEIC ACID COUNT (NA): 783 a 1137 c 1074 g 678 t
COMMENT:
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Jim Lin, University of Iowa
cDNA Library Preparation: M. Bento Soares, University of Iowa
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome Center, Stanford University School of Medicine, Stanford, CA 94305
Web site: http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers, R. M.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
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This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21218439.
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AUTHOR (AU): Strausberg,R.L.; Feingold,E.A.; Grouse,L.H.; Derge,J.G.; Klausner,R.D.; Collins,F.S.; Wagner,L.; Shenmen,C.M.; Schuler,G.D.; Altschul,S.F.; Zeeberg,B.; Buetow,K.H.; Schaefer,C.F.; Bhat,N.K.; Hopkins,R.F.; Jordan,H.; Moore,T.; Max,S.I.; Wang,J.; Hsieh,F.; Diatchenko,L.; Marusina,K.; Farmer,A.A.; Rubin,G.M.; Hong,L.; Stapleton,M.; Soares,M.B.; Bonaldo,M.F.; Casavant,T.L.; Scheetz,T.E.; Brownstein,M.J.; Usdin,T.B.; Toshiyuki,S.; Carninci,P.; Prange,C.; Raha,S.S.; Loquellano,N.A.; Peters,G.J.; Abramson,R.D.;

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Skalska,U.; Smailus,D.E.; Schnerch,A.; Schein,J.E.;
Jones,S.J.; Marra,M.A.

TITLE (TI): Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences

JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903 (2002)

OTHER SOURCE (OS): CA 138:84325

REFERENCE: 2 (bases 1 to 3672)

AUTHOR (AU): Strausberg,R.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (03-SEP-2003) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

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L2   ANSWER 88 OF 104     GENBANK.RTM.  COPYRIGHT 2004 on STN

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DATE (DATE):              21 Oct 2003
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KEYWORDS (ST):            MGC
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COMMENT:
     Contact: MGC help desk
     Email: cgapbs-r@mail.nih.gov
     Tissue Procurement: Dr. Jim Lin, University of Iowa
     cDNA Library Preparation: M. Bento Soares, University of Iowa
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     BC Cancer Agency, Vancouver, BC, Canada
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   AUTHOR (AU):       Strausberg,R.
   TITLE (TI):        Direct Submission
   JOURNAL (SO):      Submitted (08-SEP-2003) National Institutes of Health,
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in cell death (apoptosis).
Alpha-helical domain present in a
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DIVISION CODE (CI): Other vertebrates
DATE (DATE): 5 Aug 2003
DEFINITION (DEF): Danio rerio SH3BP4 mRNA for src homology 3 binding protein 4, complete cds.
SOURCE: Danio rerio (zebrafish)
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REFERENCE: 1
AUTHOR (AU): Abe,S.; Doi,M.; Nakagawa,T.
TITLE (TI): Structural and phylogenetic analyses of the SH3BP4 cDNAs in fish and human
JOURNAL (SO): Unpublished
REFERENCE: 2
AUTHOR (AU): Abe,S.; Nakagawa,T.; Wang,P.
TITLE (TI): Danio rerio cDNA for SH3BP4 long form, complete CDS
JOURNAL (SO): Published Only in Database (2003)
REFERENCE: 3 (bases 1 to 3314)
AUTHOR (AU): Abe,S.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (14-JUL-2003) Shunnosuke Abe, Ehime University, Laboratory of Molecular Cell Biology, Department of Bioresources, Faculty of Agriculture; 3-5-7 Tarumi, Matsuyama City, Ehime Prefecture 7908566, Japan (E-mail:abe@mcb.agr.ehime-u.ac.jp, URL:http://web-mcb.agr.ehime-u.ac.jp/, Tel:81-89-946-9853, Fax:81-89-977-4364)

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L2 ANSWER 90 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

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DIVISION CODE (CI):       Other vertebrates
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   TITLE (TI):            Danio rerio mRNA for tr-SH3BP4 (truncated SH3 binding
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   JOURNAL (SO):          Published Only in Database (2003)
REFERENCE:                2  (bases 1 to 2808)
   AUTHOR (AU):           Abe,S.
   TITLE (TI):            Direct Submission
   JOURNAL (SO):          Submitted (04-MAR-2003) Shunnosuke Abe, Ehime
                          University, Laboratory of Molecular Cell Biology,
                          Department of Bioresources, Faculty of Agriculture;
                          3-5-7 Tarumi, Matsuyama City, Ehime Prefecture 7908566,
                          Japan (E-mail:abe@mcb.agr.ehime-u.ac.jp,
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L2 ANSWER 91 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AY187310 GenBank (R)
GenBank ACC. NO. (GBN): AY187310
GenBank VERSION (VER): AY187310.1 GI:31442350
CAS REGISTRY NO. (RN): 528194-13-0
SEQUENCE LENGTH (SQL): 2962
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Other vertebrates
DATE (DATE): 6 Jun 2003
DEFINITION (DEF): Gallus gallus ***UNC5*** -like protein 3 mRNA, complete cds.
SOURCE: Gallus gallus (chicken)
ORGANISM (ORGN): Gallus gallus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus
NUCLEIC ACID COUNT (NA): 746 a 783 c 803 g 630 t
REFERENCE: 1 (bases 1 to 2962)
AUTHOR (AU): Guan,W.; Condic,M.L.
TITLE (TI): Characterization of Netrin-1, Neogenin and cUNC-5H3 expression during chick dorsal root ganglia development
JOURNAL (SO): Gene Expr. Patterns, 3, 369-373 (2003)
OTHER SOURCE (OS): CA 139:320285
REFERENCE: 2 (bases 1 to 2962)
AUTHOR (AU): Guan,W.; Condic,M.L.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (26-NOV-2002) Neurobiology & Anatomy, University of Utah, 20 North, 1900 East, Salt Lake City, UT 84132-3401, USA

FEATURES (FEAT):

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L2  ANSWER 92 OF 104  GENBANK.RTM.  COPYRIGHT 2004 on STN

LOCUS (LOC): BC048162 GenBank (R)
GenBank ACC. NO. (GBN): BC048162
GenBank VERSION (VER): BC048162.1 GI:29145031
CAS REGISTRY NO. (RN): 503766-79-8
SEQUENCE LENGTH (SQL): 3672
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Rodents
DATE (DATE): 21 Oct 2003
DEFINITION (DEF): Mus musculus unc-5 homolog B (C. elegans), mRNA (cDNA clone IMAGE:6417563), partial cds.
SOURCE: Mus musculus (house mouse)
ORGANISM (ORGN): Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NUCLEIC ACID COUNT (NA): 783 a 1137 c 1074 g 678 t
COMMENT:
Contact: MGC help desk

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Jim Lin, University of Iowa
cDNA Library Preparation: M. Bento Soares, University of Iowa
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: University of Iowa, Dr. M. Bento Soares and Dr. Thomas L. Casavant.
Web site: http://genome.uiowa.edu
Contact: bento-soares@uiowa.edu; tom-casavant@uiowa.edu
Bonaldo,M.F., Akabogu,I., Bair,T., Bair,J., Crouch,K., Davis,A., Fishler,K., Keppel,C., Kucaba,T., Lebeck,M., Melo,A., Schaefer,K., Scheetz,T., Smith,C., Snir,E., Tack,D., Trout,K., Walters,J., Casavant,T., Soares,M.B.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: Plate: Row: Column: 0
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21218439.

REFERENCE: 1 (bases 1 to 3672)
AUTHOR (AU): Strausberg,R.L.; Feingold,E.A.; Grouse,L.H.; Derge,J.G.; Klausner,R.D.; Collins,F.S.; Wagner,L.; Shenmen,C.M.; Schuler,G.D.; Altschul,S.F.; Zeeberg,B.; Buetow,K.H.; Schaefer,C.F.; Bhat,N.K.; Hopkins,R.F.; Jordan,H.; Moore,T.; Max,S.I.; Wang,J.; Hsieh,F.; Diatchenko,L.; Marusina,K.; Farmer,A.A.; Rubin,G.M.; Hong,L.; Stapleton,M.; Soares,M.B.; Bonaldo,M.F.; Casavant,T.L.; Scheetz,T.E.; Brownstein,M.J.; Usdin,T.B.; Toshiyuki,S.; Carninci,P.; Prange,C.; Raha,S.S.; Loquellano,N.A.; Peters,G.J.; Abramson,R.D.; Mullahy,S.J.; Bosak,S.A.; McEwan,P.J.; McKernan,K.J.; Malek,J.A.; Gunaratne,P.H.; Richards,S.; Worley,K.C.; Hale,S.; Garcia,A.M.; Gay,L.J.; Hulyk,S.W.; Villalon,D.K.; Muzny,D.M.; Sodergren,E.J.; Lu,X.; Gibbs,R.A.; Fahey,J.; Helton,E.; Ketteman,M.; Madan,A.; Rodrigues,S.; Sanchez,A.; Whiting,M.; Madan,A.; Young,A.C.; Shevchenko,Y.; Bouffard,G.G.; Blakesley,R.W.; Touchman,J.W.; Green,E.D.; Dickson,M.C.; Rodriguez,A.C.; Grimwood,J.; Schmutz,J.; Myers,R.M.; Butterfield,Y.S.; Krzywinski,M.I.; Skalska,U.; Smailus,D.E.; Schnerch,A.; Schein,J.E.; Jones,S.J.; Marra,M.A.
TITLE (TI): Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903 (2002)
OTHER SOURCE (OS): CA 138:84325

REFERENCE: 2 (bases 1 to 3672)
AUTHOR (AU): Strausberg,R.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (06-MAR-2003) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

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L2  ANSWER 93 OF 104  GENBANK.RTM.  COPYRIGHT 2004 on STN

LOCUS (LOC): BC041156 GenBank (R)
GenBank ACC. NO. (GBN): BC041156
GenBank VERSION (VER): BC041156.1 GI:27370704
CAS REGISTRY NO. (RN): 492985-83-8
SEQUENCE LENGTH (SQL): 2270
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 21 Oct 2003
DEFINITION (DEF): Homo sapiens unc-5 homolog C (C. elegans), mRNA (cDNA clone MGC:48696 IMAGE:5208108), complete cds.
KEYWORDS (ST): MGC
SOURCE: Homo sapiens (human)
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
NUCLEIC ACID COUNT (NA): 577 a 569 c 585 g 539 t
COMMENT:
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAK Plate: 84 Row: d Column: 5
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 16933524.

REFERENCE: 1 (bases 1 to 2270)
AUTHOR (AU): Strausberg,R.L.; Feingold,E.A.; Grouse,L.H.; Derge,J.G.; Klausner,R.D.; Collins,F.S.; Wagner,L.; Shenmen,C.M.; Schuler,G.D.; Altschul,S.F.; Zeeberg,B.; Buetow,K.H.; Schaefer,C.F.; Bhat,N.K.; Hopkins,R.F.; Jordan,H.; Moore,T.; Max,S.I.; Wang,J.; Hsieh,F.; Diatchenko,L.; Marusina,K.; Farmer,A.A.; Rubin,G.M.; Hong,L.; Stapleton,M.; Soares,M.B.; Bonaldo,M.F.; Casavant,T.L.; Scheetz,T.E.; Brownstein,M.J.; Usdin,T.B.; Toshiyuki,S.; Carninci,P.; Prange,C.; Raha,S.S.; Loquellano,N.A.; Peters,G.J.; Abramson,R.D.; Mullahy,S.J.; Bosak,S.A.; McEwan,P.J.; McKernan,K.J.; Malek,J.A.; Gunaratne,P.H.; Richards,S.; Worley,K.C.; Hale,S.; Garcia,A.M.; Gay,L.J.; Hulyk,S.W.; Villalon,D.K.; Muzny,D.M.; Sodergren,E.J.; Lu,X.; Gibbs,R.A.; Fahey,J.; Helton,E.; Ketteman,M.; Madan,A.; Rodrigues,S.; Sanchez,A.; Whiting,M.; Madan,A.; Young,A.C.; Shevchenko,Y.; Bouffard,G.G.; Blakesley,R.W.; Touchman,J.W.; Green,E.D.; Dickson,M.C.; Rodriguez,A.C.; Grimwood,J.; Schmutz,J.; Myers,R.M.; Butterfield,Y.S.; Krzywinski,M.I.; Skalska,U.; Smailus,D.E.; Schnerch,A.; Schein,J.E.; Jones,S.J.; Marra,M.A.
TITLE (TI): Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903 (2002)
OTHER SOURCE (OS): CA 138:84325

REFERENCE: 2 (bases 1 to 2270)
AUTHOR (AU): Strausberg,R.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-DEC-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

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/db-xref="CDD:smart00209"

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/db-xref="CDD:smart00209"

misc-feature 1988..2140
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L2 ANSWER 94 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AK031655 GenBank (R)
GenBank ACC. NO. (GBN): AK031655
GenBank VERSION (VER): AK031655.1 GI:26327502
CAS REGISTRY NO. (RN): 486389-66-6
SEQUENCE LENGTH (SQL): 3790
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): High-Throughput CDNA Sequencing
DATE (DATE): 3 Apr 2004
DEFINITION (DEF): Mus musculus 13 days embryo male testis cDNA, RIKEN

full-length enriched library, clone:6030473H24 product:
***unc5***  homolog (C. elegans) 3, full insert
sequence.
KEYWORDS (ST): HTC; CAP trapper
SOURCE: Mus musculus (house mouse)
ORGANISM (ORGN): Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Rodentia;
Sciurognathi; Muridae; Murinae; Mus
COMMENT:
cDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed to
prepare mouse tissues.
Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE: 1
AUTHOR (AU): Carninci,P.; Hayashizaki,Y.
TITLE (TI): High-efficiency full-length cDNA cloning
JOURNAL (SO): Meth. Enzymol., 303, 19-44 (1999)
OTHER SOURCE (OS): CA 131:318304
REFERENCE: 2
AUTHOR (AU): Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.;
Shibata,K.; Itoh,M.; Konno,H.; Okazaki,Y.;
Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Normalization and subtraction of cap-trapper-selected
cDNAs to prepare full-length cDNA libraries for rapid
discovery of new genes
JOURNAL (SO): Genome Res., 10 (10), 1617-1630 (2000)
OTHER SOURCE (OS): CA 134:305920
REFERENCE: 3
AUTHOR (AU): Shibata,K.; Itoh,M.; Aizawa,K.; Nagaoka,S.; Sasaki,N.;
Carninci,P.; Konno,H.; Akiyama,J.; Nishi,K.;
Kitsunai,T.; Tashiro,H.; Itoh,M.; Sumi,N.; Ishii,Y.;
Nakamura,S.; Hazama,M.; Nishine,T.; Harada,A.;
Yamamoto,R.; Matsumoto,H.; Sakaguchi,S.; Ikegami,T.;
Kashiwagi,K.; Fujiwake,S.; Inoue,K.; Togawa,Y.;
Izawa,M.; Ohara,E.; Watahiki,M.; Yoneda,Y.;
Ishikawa,T.; Ozawa,K.; Tanaka,T.; Matsuura,S.;
Kawai,J.; Okazaki,Y.; Muramatsu,M.; Inoue,Y.; Kira,A.;
Hayashizaki,Y.
TITLE (TI): RIKEN integrated sequence analysis (RISA)
system--384-format sequencing pipeline with 384
multicapillary sequencer
JOURNAL (SO): Genome Res., 10 (11), 1757-1771 (2000)
REFERENCE: 4
AUTHOR (AU): The RIKEN Genome Exploration Research Group Phase II
Team; the FANTOM Consortium.
TITLE (TI): Functional annotation of a full-length mouse cDNA
collection
JOURNAL (SO): Nature, 409, 685-690 (2001)
OTHER SOURCE (OS): CA 134:203311
REFERENCE: 5
AUTHOR (AU): The FANTOM Consortium; the RIKEN Genome Exploration
Research Group Phase I & II Team.
TITLE (TI): Analysis of the mouse transcriptome based on functional
annotation of 60,770 full-length cDNAs
JOURNAL (SO): Nature, 420, 563-573 (2002)
OTHER SOURCE (OS): CA 138:131939
REFERENCE: 6 (bases 1 to 3790)
AUTHOR (AU): Adachi,J.; Aizawa,K.; Akimura,T.; Arakawa,T.; Bono,H.;
Carninci,P.; Fukuda,S.; Furuno,M.; Hanagaki,T.;
Hara,A.; Hashizume,W.; Hayashida,K.; Hayatsu,N.;
Hiramoto,K.; Hiraoka,T.; Hirozane,T.; Hori,F.;
Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.;
Katoh,H.; Kawai,J.; Kojima,Y.; Kondo,S.; Konno,H.;
Kouda,M.; Koya,S.; Kurihara,C.; Matsuyama,T.;
Miyazaki,A.; Murata,M.; Nakamura,M.; Nishi,K.;
Nomura,K.; Numazaki,R.; Ohno,M.; Ohsato,N.; Okazaki,Y.;
Saito,R.; Saitoh,H.; Sakai,C.; Sakai,K.; Sakazume,N.;
Sano,H.; Sasaki,D.; Shibata,K.; Shinagawa,A.;
Shiraki,T.; Sogabe,Y.; Tagami,M.; Tagawa,A.;
Takahashi,F.; Takaku-Akahira,S.; Takeda,Y.; Tanaka,T.;
Tomaru,A.; Toya,T.; Yasunishi,A.; Muramatsu,M.;

Hayashizaki,Y.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)

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| CDS | 118..2970 | /note="unnamed protein product; putative unc5 homolog (C. elegans) 3 (MGD\|MGI:1095412, GB\|NM-009472, evidence: BLASTN, 99%, match=464)"<br>/codon-start=1<br>/protein-id="BAC27495.1"<br>/db-xref="GI:26327503"<br>/translation="MRKGLRATAARCGLGIGYLL<br>QMLVLPALALLSASGTGSAAQDDE<br>FFHELPETFPSDPPEPLPHFLIEPEEAYIVKNKP<br>VNLYCKASPATQIYFKCNSEWVHQ<br>KDHVVDERVDETSGLIVREVSIEISRQQVEELFG<br>PEDYWCQCVAWSSAGTTKSRKAYV<br>RIAYLRKTFEQEPLGKEVSLEQEVLLQCRPPEGI<br>PVAEVEWLKNEDIIDPAEDRNFYI<br>TIDHNLIIKQARLSDTANYTCVAKNIVAKRKSTT<br>ATVIVYVNGGWSTWTEWSVCNSRC<br>GRGYQKRTRTCTNPAPLNGGAFCEGQSVQKIACT<br>TLCPVDGRWTSWSKWSTCGTECTH<br>WRRRECTAPAPKNGGKDCDGLVLQSKNCTDGLCM<br>QGFIYPISTEHRPQNEYGFSSAPD<br>SDDVALYVGIVIAVTVCLAITVVVALFVYRKNHR<br>DFESDIIDSSALNGGFQPVNIKAA<br>RQDLLAVPPDLTSAAAMYRGPVYALHDVSDKIPM<br>TNSPILDPLPNLKIKVYNSSGAVT<br>PQDDLAEFSSKLSPQMTQSLLENEALNLKNQSLA<br>RQTDPSCTAFGTFNSLGGHLIIPN<br>SGVSLLIPAGAIPQGRVYEMYVTVHRKENMRPPM<br>EDSQTLLTPVVSCGPPGALLTRPV<br>ILTLHHCADPSTEDWKIQLKNQAVQGQWEDVVVV<br>GEENFTTPCYIQLDAEACHILTEN<br>LSTYALVGQSTTKAAAKRLKLAIFGPLCCSSLEY<br>SIRVYCLDDTQDALKEVLQLERQM<br>GGQLLEEPKALRFKGSIHNLRLSIHDIAHSLWKS<br>KLLAKYQEIPFYHIWSGSQRNLHC<br>TFTLERLSLNTVELVCKLCVRQVEGEGQIFQLNC<br>TVSEEPTGIDLPLLDPASTITTVT<br>GPSAFSIPLPIRQKLCSSLDAPQTRGHDWRMLAH<br>KLNLDRYLNYFATKSSPTGVILDL<br>WEAQNFPDGNLSMLAAVLEEMGRHETVVYLAAEG<br>QY" |

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L2   ANSWER 95 OF 104     GENBANK.RTM.  COPYRIGHT 2004 on STN

LOCUS (LOC):              AK048339     GenBank (R)
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GenBank VERSION (VER):    AK048339.1  GI:26092820
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DIVISION CODE (CI):       High-Throughput CDNA Sequencing
DATE (DATE):              3 Apr 2004
DEFINITION (DEF):         Mus musculus 16 days embryo head cDNA, RIKEN
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                            ***unc5***   homolog (C. elegans) 3, full insert
                          sequence.
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SOURCE:                   Mus musculus (house mouse)
 ORGANISM (ORGN):         Mus musculus
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                          Euteleostomi; Mammalia; Eutheria; Rodentia;
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Sciurognathi; Muridae; Murinae; Mus
COMMENT:
cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.
Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE: 1
AUTHOR (AU): Carninci,P.; Hayashizaki,Y.
TITLE (TI): High-efficiency full-length cDNA cloning
JOURNAL (SO): Meth. Enzymol., 303, 19-44 (1999)
OTHER SOURCE (OS): CA 131:318304
REFERENCE: 2
AUTHOR (AU): Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.; Shibata,K.; Itoh,M.; Konno,H.; Okazaki,Y.; Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes
JOURNAL (SO): Genome Res., 10 (10), 1617-1630 (2000)
OTHER SOURCE (OS): CA 134:305920
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AUTHOR (AU): Shibata,K.; Itoh,M.; Aizawa,K.; Nagaoka,S.; Sasaki,N.; Carninci,P.; Konno,H.; Akiyama,J.; Nishi,K.; Kitsunai,T.; Tashiro,H.; Itoh,M.; Sumi,N.; Ishii,Y.; Nakamura,S.; Hazama,M.; Nishine,T.; Harada,A.; Yamamoto,R.; Matsumoto,H.; Sakaguchi,S.; Ikegami,T.; Kashiwagi,K.; Fujiwake,S.; Inoue,K.; Togawa,Y.; Izawa,M.; Ohara,E.; Watahiki,M.; Yoneda,Y.; Ishikawa,T.; Ozawa,K.; Tanaka,T.; Matsuura,S.; Kawai,J.; Okazaki,Y.; Muramatsu,M.; Inoue,Y.; Kira,A.; Hayashizaki,Y.
TITLE (TI): RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer
JOURNAL (SO): Genome Res., 10 (11), 1757-1771 (2000)
REFERENCE: 4
AUTHOR (AU): The RIKEN Genome Exploration Research Group Phase II Team; the FANTOM Consortium.
TITLE (TI): Functional annotation of a full-length mouse cDNA collection
JOURNAL (SO): Nature, 409, 685-690 (2001)
OTHER SOURCE (OS): CA 134:203311
REFERENCE: 5
AUTHOR (AU): The FANTOM Consortium; the RIKEN Genome Exploration Research Group Phase I & II Team.
TITLE (TI): Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
JOURNAL (SO): Nature, 420, 563-573 (2002)
OTHER SOURCE (OS): CA 138:131939
REFERENCE: 6 (bases 1 to 2358)
AUTHOR (AU): Adachi,J.; Aizawa,K.; Akimura,T.; Arakawa,T.; Bono,H.; Carninci,P.; Fukuda,S.; Furuno,M.; Hanagaki,T.; Hara,A.; Hashizume,W.; Hayashida,K.; Hayatsu,N.; Hiramoto,K.; Hiraoka,T.; Hirozane,T.; Hori,F.; Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.; Katoh,H.; Kawai,J.; Kojima,Y.; Kondo,S.; Konno,H.; Kouda,M.; Koya,S.; Kurihara,C.; Matsuyama,T.; Miyazaki,A.; Murata,M.; Nakamura,M.; Nishi,K.; Nomura,K.; Numazaki,R.; Ohno,M.; Ohsato,N.; Okazaki,Y.; Saito,R.; Saitoh,H.; Sakai,C.; Sakai,K.; Sakazume,N.; Sano,H.; Sasaki,D.; Shibata,K.; Shinagawa,A.; Shiraki,T.; Sogabe,Y.; Tagami,M.; Tagawa,A.; Takahashi,F.; Takaku-Akahira,S.; Takeda,Y.; Tanaka,T.; Tomaru,A.; Toya,T.; Yasunishi,A.; Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-

res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/,
Tel:81-45-503-9222, Fax:81-45-503-9216)

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| misc-feature | 1..2358 | /note="unc5 homolog (C. elegans) 3 (MGD\|MGI:1095412, GB\|NM-009472, evidence: BLASTN, 100%, match=239)" |

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L2 ANSWER 96 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

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| LOCUS (LOC): | AK045251 GenBank (R) |
| GenBank ACC. NO. (GBN): | AK045251 |
| GenBank VERSION (VER): | AK045251.1 GI:26090799 |
| CAS REGISTRY NO. (RN): | 492752-02-0 |
| SEQUENCE LENGTH (SQL): | 3376 |
| MOLECULE TYPE (CI): | mRNA; linear |
| DIVISION CODE (CI): | High-Throughput CDNA Sequencing |
| DATE (DATE): | 3 Apr 2004 |
| DEFINITION (DEF): | Mus musculus 9.5 days embryo parthenogenote cDNA, RIKEN full-length enriched library, clone:B130051018 product: ***unc5*** homolog (C. elegans) 3, full insert |

sequence.
KEYWORDS (ST): HTC; CAP trapper
SOURCE: Mus musculus (house mouse)
ORGANISM (ORGN): Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
COMMENT:
cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.
Tissues were provided by Dr. Tomohiro Kono (Department of Animal Science, Tokyo University of Agriculture, 1737 Hunako Atsugi City, Kanagawa Prefecture, Japan) whose assistance we gratefully acknowledge.
Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE: 1
AUTHOR (AU): Carninci,P.; Hayashizaki,Y.
TITLE (TI): High-efficiency full-length cDNA cloning
JOURNAL (SO): Meth. Enzymol., 303, 19-44 (1999)
OTHER SOURCE (OS): CA 131:318304
REFERENCE: 2
AUTHOR (AU): Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.; Shibata,K.; Itoh,M.; Konno,H.; Okazaki,Y.; Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes
JOURNAL (SO): Genome Res., 10 (10), 1617-1630 (2000)
OTHER SOURCE (OS): CA 134:305920
REFERENCE: 3
AUTHOR (AU): Shibata,K.; Itoh,M.; Aizawa,K.; Nagaoka,S.; Sasaki,N.; Carninci,P.; Konno,H.; Akiyama,J.; Nishi,K.; Kitsunai,T.; Tashiro,H.; Itoh,M.; Sumi,N.; Ishii,Y.; Nakamura,S.; Hazama,M.; Nishine,T.; Harada,A.; Yamamoto,R.; Matsumoto,H.; Sakaguchi,S.; Ikegami,T.; Kashiwagi,K.; Fujiwake,S.; Inoue,K.; Togawa,Y.; Izawa,M.; Ohara,E.; Watahiki,M.; Yoneda,Y.; Ishikawa,T.; Ozawa,K.; Tanaka,T.; Matsuura,S.; Kawai,J.; Okazaki,Y.; Muramatsu,M.; Inoue,Y.; Kira,A.; Hayashizaki,Y.
TITLE (TI): RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer
JOURNAL (SO): Genome Res., 10 (11), 1757-1771 (2000)
REFERENCE: 4
AUTHOR (AU): The RIKEN Genome Exploration Research Group Phase II Team; the FANTOM Consortium.
TITLE (TI): Functional annotation of a full-length mouse cDNA collection
JOURNAL (SO): Nature, 409, 685-690 (2001)
OTHER SOURCE (OS): CA 134:203311
REFERENCE: 5
AUTHOR (AU): The FANTOM Consortium; the RIKEN Genome Exploration Research Group Phase I & II Team.
TITLE (TI): Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
JOURNAL (SO): Nature, 420, 563-573 (2002)
OTHER SOURCE (OS): CA 138:131939
REFERENCE: 6 (bases 1 to 3376)
AUTHOR (AU): Adachi,J.; Aizawa,K.; Akimura,T.; Arakawa,T.; Bono,H.; Carninci,P.; Fukuda,S.; Furuno,M.; Hanagaki,T.; Hara,A.; Hashizume,W.; Hayashida,K.; Hayatsu,N.; Hiramoto,K.; Hiraoka,T.; Hirozane,T.; Hori,F.; Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.; Katoh,H.; Kawai,J.; Kojima,Y.; Kondo,S.; Konno,H.; Kouda,M.; Koya,S.; Kurihara,C.; Matsuyama,T.; Miyazaki,A.; Murata,M.; Nakamura,M.; Nishi,K.; Nomura,K.; Numazaki,R.; Ohno,M.; Ohsato,N.; Okazaki,Y.; Saito,R.; Saitoh,H.; Sakai,C.; Sakai,K.; Sakazume,N.; Sano,H.; Sasaki,D.; Shibata,K.; Shinagawa,A.; Shiraki,T.; Sogabe,Y.; Tagami,M.; Tagawa,A.;

Takahashi,F.; Takaku-Akahira,S.; Takeda,Y.; Tanaka,T.; Tomaru,A.; Toya,T.; Yasunishi,A.; Muramatsu,M.; Hayashizaki,Y.

TITLE (TI): Direct Submission

JOURNAL (SO): Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)

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L2   ANSWER 97 OF 104     GENBANK.RTM.  COPYRIGHT 2004 on STN

LOCUS (LOC):              AK035842     GenBank (R)
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DIVISION CODE (CI):       High-Throughput CDNA Sequencing
DATE (DATE):              3 Apr 2004
DEFINITION (DEF):         Mus musculus 16 days neonate cerebellum cDNA, RIKEN
                          full-length enriched library, clone:9630009N10 product:
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                          sequence.
KEYWORDS (ST):            HTC; CAP trapper
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COMMENT:
     cDNA library was prepared and sequenced in Mouse Genome
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     Genomic Sciences Center and Genome Science Laboratory in RIKEN.
     Division of Experimental Animal Research in Riken contributed to
     prepare mouse tissues.
     Please visit our web site for further details.
     URL:http://genome.gsc.riken.jp/
     URL:http://fantom.gsc.riken.jp/.
REFERENCE:                1
   AUTHOR (AU):           Carninci,P.; Hayashizaki,Y.
   TITLE (TI):            High-efficiency full-length cDNA cloning
   JOURNAL (SO):          Meth. Enzymol., 303, 19-44 (1999)
   OTHER SOURCE (OS):     CA 131:318304
REFERENCE:                2
   AUTHOR (AU):           Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.;
                          Shibata,K.; Itoh,M.; Konno,H.; Okazaki,Y.;
                          Muramatsu,M.; Hayashizaki,Y.
   TITLE (TI):            Normalization and subtraction of cap-trapper-selected
                          cDNAs to prepare full-length cDNA libraries for rapid
                          discovery of new genes
   JOURNAL (SO):          Genome Res., 10 (10), 1617-1630 (2000)
   OTHER SOURCE (OS):     CA 134:305920
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   AUTHOR (AU):           Shibata,K.; Itoh,M.; Aizawa,K.; Nagaoka,S.; Sasaki,N.;
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                          Hayashizaki,Y.
   TITLE (TI):            RIKEN integrated sequence analysis (RISA)
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   JOURNAL (SO):          Genome Res., 10 (11), 1757-1771 (2000)
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   AUTHOR (AU):           The RIKEN Genome Exploration Research Group Phase II
                          Team; the FANTOM Consortium.
   TITLE (TI):            Functional annotation of a full-length mouse cDNA
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JOURNAL (SO): Nature, 409, 685-690 (2001)
OTHER SOURCE (OS): CA 134:203311
REFERENCE: 5
AUTHOR (AU): The FANTOM Consortium; the RIKEN Genome Exploration Research Group Phase I & II Team.
TITLE (TI): Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
JOURNAL (SO): Nature, 420, 563-573 (2002)
OTHER SOURCE (OS): CA 138:131939
REFERENCE: 6 (bases 1 to 3620)
AUTHOR (AU): Adachi,J.; Aizawa,K.; Akimura,T.; Arakawa,T.; Bono,H.; Carninci,P.; Fukuda,S.; Furuno,M.; Hanagaki,T.; Hara,A.; Hashizume,W.; Hayashida,K.; Hayatsu,N.; Hiramoto,K.; Hiraoka,T.; Hirozane,T.; Hori,F.; Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.; Katoh,H.; Kawai,J.; Kojima,Y.; Kondo,S.; Konno,H.; Kouda,M.; Koya,S.; Kurihara,C.; Matsuyama,T.; Miyazaki,A.; Murata,M.; Nakamura,M.; Nishi,K.; Nomura,K.; Numazaki,R.; Ohno,M.; Ohsato,N.; Okazaki,Y.; Saito,R.; Saitoh,H.; Sakai,C.; Sakai,K.; Sakazume,N.; Sano,H.; Sasaki,D.; Shibata,K.; Shinagawa,A.; Shiraki,T.; Sogabe,Y.; Tagami,M.; Tagawa,A.; Takahashi,F.; Takaku-Akahira,S.; Takeda,Y.; Tanaka,T.; Tomaru,A.; Toya,T.; Yasunishi,A.; Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)

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L2 ANSWER 98 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AK035038 GenBank (R)
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GenBank VERSION (VER): AK035038.1 GI:26084357
CAS REGISTRY NO. (RN): 492700-62-6
SEQUENCE LENGTH (SQL): 3050
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): High-Throughput CDNA Sequencing
DATE (DATE): 3 Apr 2004
DEFINITION (DEF): Mus musculus 12 days embryo embryonic body between diaphragm region and neck cDNA, RIKEN full-length enriched library, clone:9430077M22 product: ***unc5*** homolog (C. elegans) 3, full insert sequence.
KEYWORDS (ST): HTC; CAP trapper
SOURCE: Mus musculus (house mouse)
ORGANISM (ORGN): Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
COMMENT:
cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.
Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE: 1
AUTHOR (AU): Carninci,P.; Hayashizaki,Y.
TITLE (TI): High-efficiency full-length cDNA cloning
JOURNAL (SO): Meth. Enzymol., 303, 19-44 (1999)
OTHER SOURCE (OS): CA 131:318304
REFERENCE: 2
AUTHOR (AU): Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.;

Shibata,K.; Itoh,M.; Konno,H.; Okazaki,Y.;
Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes
JOURNAL (SO): Genome Res., 10 (10), 1617-1630 (2000)
OTHER SOURCE (OS): CA 134:305920
REFERENCE: 3
AUTHOR (AU): Shibata,K.; Itoh,M.; Aizawa,K.; Nagaoka,S.; Sasaki,N.; Carninci,P.; Konno,H.; Akiyama,J.; Nishi,K.; Kitsunai,T.; Tashiro,H.; Itoh,M.; Sumi,N.; Ishii,Y.; Nakamura,S.; Hazama,M.; Nishine,T.; Harada,A.; Yamamoto,R.; Matsumoto,H.; Sakaguchi,S.; Ikegami,T.; Kashiwagi,K.; Fujiwake,S.; Inoue,K.; Togawa,Y.; Izawa,M.; Ohara,E.; Watahiki,M.; Yoneda,Y.; Ishikawa,T.; Ozawa,K.; Tanaka,T.; Matsuura,S.; Kawai,J.; Okazaki,Y.; Muramatsu,M.; Inoue,Y.; Kira,A.; Hayashizaki,Y.
TITLE (TI): RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer
JOURNAL (SO): Genome Res., 10 (11), 1757-1771 (2000)
REFERENCE: 4
AUTHOR (AU): The RIKEN Genome Exploration Research Group Phase II Team; the FANTOM Consortium.
TITLE (TI): Functional annotation of a full-length mouse cDNA collection
JOURNAL (SO): Nature, 409, 685-690 (2001)
OTHER SOURCE (OS): CA 134:203311
REFERENCE: 5
AUTHOR (AU): The FANTOM Consortium; the RIKEN Genome Exploration Research Group Phase I & II Team.
TITLE (TI): Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
JOURNAL (SO): Nature, 420, 563-573 (2002)
OTHER SOURCE (OS): CA 138:131939
REFERENCE: 6 (bases 1 to 3050)
AUTHOR (AU): Adachi,J.; Aizawa,K.; Akimura,T.; Arakawa,T.; Bono,H.; Carninci,P.; Fukuda,S.; Furuno,M.; Hanagaki,T.; Hara,A.; Hashizume,W.; Hayashida,K.; Hayatsu,N.; Hiramoto,K.; Hiraoka,T.; Hirozane,T.; Hori,F.; Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.; Katoh,H.; Kawai,J.; Kojima,Y.; Kondo,S.; Konno,H.; Kouda,M.; Koya,S.; Kurihara,C.; Matsuyama,T.; Miyazaki,A.; Murata,M.; Nakamura,M.; Nishi,K.; Nomura,K.; Numazaki,R.; Ohno,M.; Ohsato,N.; Okazaki,Y.; Saito,R.; Saitoh,H.; Sakai,C.; Sakai,K.; Sakazume,N.; Sano,H.; Sasaki,D.; Shibata,K.; Shinagawa,A.; Shiraki,T.; Sogabe,Y.; Tagami,M.; Tagawa,A.; Takahashi,F.; Takaku-Akahira,S.; Takeda,Y.; Tanaka,T.; Tomaru,A.; Toya,T.; Yasunishi,A.; Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)

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L2 ANSWER 99 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AK034558 GenBank (R)
GenBank ACC. NO. (GBN): AK034558
GenBank VERSION (VER): AK034558.1 GI:26084048
CAS REGISTRY NO. (RN): 492697-53-7
SEQUENCE LENGTH (SQL): 3052
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): High-Throughput CDNA Sequencing
DATE (DATE): 3 Apr 2004
DEFINITION (DEF): Mus musculus 12 days embryo embryonic body between diaphragm region and neck cDNA, RIKEN full-length enriched library, clone:9430006E08 product: ***unc5*** homolog (C. elegans) 3, full insert sequence.
KEYWORDS (ST): HTC; CAP trapper
SOURCE: Mus musculus (house mouse)
ORGANISM (ORGN): Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia;

Sciurognathi; Muridae; Murinae; Mus
COMMENT:
cDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed to
prepare mouse tissues.
Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE: 1
AUTHOR (AU): Carninci,P.; Hayashizaki,Y.
TITLE (TI): High-efficiency full-length cDNA cloning
JOURNAL (SO): Meth. Enzymol., 303, 19-44 (1999)
OTHER SOURCE (OS): CA 131:318304
REFERENCE: 2
AUTHOR (AU): Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.; Shibata,K.; Itoh,M.; Konno,H.; Okazaki,Y.; Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes
JOURNAL (SO): Genome Res., 10 (10), 1617-1630 (2000)
OTHER SOURCE (OS): CA 134:305920
REFERENCE: 3
AUTHOR (AU): Shibata,K.; Itoh,M.; Aizawa,K.; Nagaoka,S.; Sasaki,N.; Carninci,P.; Konno,H.; Akiyama,J.; Nishi,K.; Kitsunai,T.; Tashiro,H.; Itoh,M.; Sumi,N.; Ishii,Y.; Nakamura,S.; Hazama,M.; Nishine,T.; Harada,A.; Yamamoto,R.; Matsumoto,H.; Sakaguchi,S.; Ikegami,T.; Kashiwagi,K.; Fujiwake,S.; Inoue,K.; Togawa,Y.; Izawa,M.; Ohara,E.; Watahiki,M.; Yoneda,Y.; Ishikawa,T.; Ozawa,K.; Tanaka,T.; Matsuura,S.; Kawai,J.; Okazaki,Y.; Muramatsu,M.; Inoue,Y.; Kira,A.; Hayashizaki,Y.
TITLE (TI): RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer
JOURNAL (SO): Genome Res., 10 (11), 1757-1771 (2000)
REFERENCE: 4
AUTHOR (AU): The RIKEN Genome Exploration Research Group Phase II Team; the FANTOM Consortium.
TITLE (TI): Functional annotation of a full-length mouse cDNA collection
JOURNAL (SO): Nature, 409, 685-690 (2001)
OTHER SOURCE (OS): CA 134:203311
REFERENCE: 5
AUTHOR (AU): The FANTOM Consortium; the RIKEN Genome Exploration Research Group Phase I & II Team.
TITLE (TI): Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
JOURNAL (SO): Nature, 420, 563-573 (2002)
OTHER SOURCE (OS): CA 138:131939
REFERENCE: 6 (bases 1 to 3052)
AUTHOR (AU): Adachi,J.; Aizawa,K.; Akimura,T.; Arakawa,T.; Bono,H.; Carninci,P.; Fukuda,S.; Furuno,M.; Hanagaki,T.; Hara,A.; Hashizume,W.; Hayashida,K.; Hayatsu,N.; Hiramoto,K.; Hiraoka,T.; Hirozane,T.; Hori,F.; Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.; Katoh,H.; Kawai,J.; Kojima,Y.; Kondo,S.; Konno,H.; Kouda,M.; Koya,S.; Kurihara,C.; Matsuyama,T.; Miyazaki,A.; Murata,M.; Nakamura,M.; Nishi,K.; Nomura,K.; Numazaki,R.; Ohno,M.; Ohsato,N.; Okazaki,Y.; Saito,R.; Saitoh,H.; Sakai,C.; Sakai,K.; Sakazume,N.; Sano,H.; Sasaki,D.; Shibata,K.; Shinagawa,A.; Shiraki,T.; Sogabe,Y.; Tagami,M.; Tagawa,A.; Takahashi,F.; Takaku-Akahira,S.; Takeda,Y.; Tanaka,T.; Tomaru,A.; Toya,T.; Yasunishi,A.; Muramatsu,M.; Hayashizaki,Y.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-

res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/,
Tel:81-45-503-9222, Fax:81-45-503-9216)

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GenBank VERSION (VER): BC021657.1 GI:18203773
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SEQUENCE LENGTH (SQL): 6420
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DIVISION CODE (CI): Rodents
DATE (DATE): 3 Oct 2003
DEFINITION (DEF): Mus musculus ankyrin 3, epithelial, mRNA (cDNA clone MGC:14049 IMAGE:4188590), complete cds.
KEYWORDS (ST): MGC
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NUCLEIC ACID COUNT (NA): 1884 a 1623 c 1620 g 1293 t
COMMENT:
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAK Plate: 18 Row: k Column: 4
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 25121951.
REFERENCE: 1 (bases 1 to 6420)
AUTHOR (AU): Strausberg,R.L.; Feingold,E.A.; Grouse,L.H.; Derge,J.G.; Klausner,R.D.; Collins,F.S.; Wagner,L.; Shenmen,C.M.; Schuler,G.D.; Altschul,S.F.; Zeeberg,B.; Buetow,K.H.; Schaefer,C.F.; Bhat,N.K.; Hopkins,R.F.; Jordan,H.; Moore,T.; Max,S.I.; Wang,J.; Hsieh,F.; Diatchenko,L.; Marusina,K.; Farmer,A.A.; Rubin,G.M.; Hong,L.; Stapleton,M.; Soares,M.B.; Bonaldo,M.F.; Casavant,T.L.; Scheetz,T.E.; Brownstein,M.J.; Usdin,T.B.; Toshiyuki,S.; Carninci,P.; Prange,C.; Raha,S.S.; Loquellano,N.A.; Peters,G.J.; Abramson,R.D.; Mullahy,S.J.; Bosak,S.A.; McEwan,P.J.; McKernan,K.J.; Malek,J.A.; Gunaratne,P.H.; Richards,S.; Worley,K.C.; Hale,S.; Garcia,A.M.; Gay,L.J.; Hulyk,S.W.; Villalon,D.K.; Muzny,D.M.; Sodergren,E.J.; Lu,X.; Gibbs,R.A.; Fahey,J.; Helton,E.; Ketteman,M.; Madan,A.; Rodrigues,S.; Sanchez,A.; Whiting,M.; Madan,A.; Young,A.C.; Shevchenko,Y.; Bouffard,G.G.; Blakesley,R.W.; Touchman,J.W.; Green,E.D.; Dickson,M.C.; Rodriguez,A.C.; Grimwood,J.; Schmutz,J.; Myers,R.M.; Butterfield,Y.S.; Krzywinski,M.I.; Skalska,U.; Smailus,D.E.; Schnerch,A.; Schein,J.E.; Jones,S.J.; Marra,M.A.
TITLE (TI): Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903 (2002)
OTHER SOURCE (OS): CA 138:84325
REFERENCE: 2 (bases 1 to 6420)
AUTHOR (AU): Strausberg,R.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (14-JAN-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

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L2 ANSWER 101 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): BC009333 GenBank (R)
GenBank ACC. NO. (GBN): BC009333
GenBank VERSION (VER): BC009333.2 GI:40226527
CAS REGISTRY NO. (RN): 342081-81-6
SEQUENCE LENGTH (SQL): 2688
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Primates
DATE (DATE): 25 Mar 2004
DEFINITION (DEF): Homo sapiens unc-5 homolog A (C. elegans), mRNA (cDNA clone IMAGE:4126760), partial cds.
SOURCE: Homo sapiens (human)
ORGANISM (ORGN): Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo

COMMENT:
On Dec 19, 2003 this sequence version replaced gi:14424611.
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural

Sequencing Center (NISC),
Gaithersburg, Maryland;
Web site: http://www.nisc.nih.gov/
Contact: nisc_mgc@nhgri.nih.gov
Akhter,N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B.,
Blakesley,R.W., Bouffard,G.G., Breen,K., Brinkley,C., Brooks,S.,
Dietrich,N.L., Granite,S., Guan,X., Gupta,J., Haghighi,P.,
Hansen,N., Ho,S.-L., Karlins,E., Kwong,P., Laric,P., Legaspi,R.,
Maduro,Q.L., Masiello,C., Maskeri,B., Mastrian,S.D.,McCloskey,J.C.,
McDowell,J., Pearson,R., Stantripop,S., Thomas,P.J., Touchman,J.W.,
Tsurgeon,C., Vogt,J.L., Walker,M.A., Wetherby,K.D., Wiggins,L.,
Young,A., Zhang,L.-H. and Green,E.D.
Clone distribution: MGC clone distribution information can be found
through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAL Plate: 26 Row: g Column: 22.

REFERENCE: 1 (bases 1 to 2688)
AUTHOR (AU): Strausberg,R.L.; Feingold,E.A.; Grouse,L.H.; Derge,J.G.; Klausner,R.D.; Collins,F.S.; Wagner,L.; Shenmen,C.M.; Schuler,G.D.; Altschul,S.F.; Zeeberg,B.; Buetow,K.H.; Schaefer,C.F.; Bhat,N.K.; Hopkins,R.F.; Jordan,H.; Moore,T.; Max,S.I.; Wang,J.; Hsieh,F.; Diatchenko,L.; Marusina,K.; Farmer,A.A.; Rubin,G.M.; Hong,L.; Stapleton,M.; Soares,M.B.; Bonaldo,M.F.; Casavant,T.L.; Scheetz,T.E.; Brownstein,M.J.; Usdin,T.B.; Toshiyuki,S.; Carninci,P.; Prange,C.; Raha,S.S.; Loquellano,N.A.; Peters,G.J.; Abramson,R.D.; Mullahy,S.J.; Bosak,S.A.; McEwan,P.J.; McKernan,K.J.; Malek,J.A.; Gunaratne,P.H.; Richards,S.; Worley,K.C.; Hale,S.; Garcia,A.M.; Gay,L.J.; Hulyk,S.W.; Villalon,D.K.; Muzny,D.M.; Sodergren,E.J.; Lu,X.; Gibbs,R.A.; Fahey,J.; Helton,E.; Ketteman,M.; Madan,A.; Rodrigues,S.; Sanchez,A.; Whiting,M.; Madan,A.; Young,A.C.; Shevchenko,Y.; Bouffard,G.G.; Blakesley,R.W.; Touchman,J.W.; Green,E.D.; Dickson,M.C.; Rodriguez,A.C.; Grimwood,J.; Schmutz,J.; Myers,R.M.; Butterfield,Y.S.; Krzywinski,M.I.; Skalska,U.; Smailus,D.E.; Schnerch,A.; Schein,J.E.; Jones,S.J.; Marra,M.A.
TITLE (TI): Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 99 (26), 16899-16903 (2002)
OTHER SOURCE (OS): CA 138:84325

REFERENCE: 2 (bases 1 to 2688)
AUTHOR (AU): Strausberg,R.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (12-JUN-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA

FEATURES (FEAT):

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L2 ANSWER 102 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

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LOCUS (LOC):              BG938104     GenBank (R)
GenBank ACC. NO. (GBN):   BG938104
GenBank VERSION (VER):    BG938104.1  GI:14337476
CAS REGISTRY NO. (RN):    340854-24-2
SEQUENCE LENGTH (SQL):    460
MOLECULE TYPE (CI):       mRNA; linear
DIVISION CODE (CI):       Expressed sequence tag
DATE (DATE):              11 Jun 2001
DEFINITION (DEF):         1Abo11D02 Bovine Abomasum cDNA Library Bos taurus cDNA
                          5', mRNA sequence.
SOURCE:                   cow.
 ORGANISM (ORGN):         Bos taurus
                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                          Euteleostomi; Mammalia; Eutheria; Cetartiodactyla;
                          Ruminantia; Pecora; Bovoidea; Bovidae; Bovinae; Bos
NUCLEIC ACID COUNT (NA): 129 a   84 c   123 g   124 t
COMMENT:
     Contact: Dr. Stephen Moore
     . Beef Genomics Laboratory
     Dept of AFNS, University of Alberta
     410 Agri/For, Dept of AFNS, U of A, Edmonton, AB, T6G 2P5, Canada
     Tel: 780 492 0169
     Fax: 780 492 4265
     Email: smoore@afns.ualberta.ca
     The sequence best matches gb:HS34B21 (Human DNA sequence from clone
     34B21 on chromosome 6p12.1-21.1. Contains part of a gene for a
     novel protein with ZU5 domain similar to part of Tight Junction
     Protein ZO1 (TJP1) and   ***UNC5***   Homologs, the gene for a novel BZR
                          alue
     of 1e-40
     PCR PRimers
     FORWARD: M13 Forward
     BACKWARD: M13 Reverse
     Seq primer: T3 primer
     High quality sequence stop: 460.
REFERENCE:                1  (bases 1 to 460)
   AUTHOR (AU):           Moore,S.S.; Hansen,C.; Li,C.; Fu,A.; Meng,Y.; Li,G.
   TITLE (TI):            cDNA's from bovine abomasum tissue
   JOURNAL (SO):          Unpublished (2001)

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                                        Site-2: Xho I"

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L2 ANSWER 103 OF 104 GENBANK.RTM. COPYRIGHT 2004 on STN

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LOCUS (LOC):              AF129475     GenBank (R)
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GenBank VERSION (VER):  AF129475.1  GI:6002701
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SEQUENCE LENGTH (SQL):  600
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DIVISION CODE (CI):     Other vertebrates
DATE (DATE):            1 Oct 1999
DEFINITION (DEF):       Petromyzon marinus netrin receptor   ***UNC5***   (
                          ***UNC5***  ) mRNA, partial cds.
SOURCE:                 sea lamprey.
 ORGANISM (ORGN):       Petromyzon marinus
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REFERENCE:              1  (bases 1 to 600)
   AUTHOR (AU):         Shifman,M.I.; Selzer,M.E.
   TITLE (TI):          Expression of the netrin receptor UNC-5 selectively in
                        poorly regenerating neurons following spinal
                        transection in lamprey
   JOURNAL (SO):        Neurorehabil. Neural Repair (1999) In press
REFERENCE:              2  (bases 1 to 600)
   AUTHOR (AU):         Shifman,M.I.; Selzer,M.E.
   TITLE (TI):          Direct Submission
   JOURNAL (SO):        Submitted (18-FEB-1999) Neurology, University of
                        Pennsylvania, 452 Stemmler Hall, 36th Street and
                        Hamilton Walk, Philadelphia, PA 19104, USA

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L2   ANSWER 104 OF 104    GENBANK.RTM.  COPYRIGHT 2004 on STN

LOCUS (LOC):              CEU62639     GenBank (R)
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DATE (DATE):            26 Jan 1999
DEFINITION (DEF):       Caenorhabditis elegans lipoprotein receptor precursor
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SOURCE:                 Caenorhabditis elegans.
 ORGANISM (ORGN):       Caenorhabditis elegans
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Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis

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REFERENCE: 1 (bases 1 to 3935)
AUTHOR (AU): Tang,P.; Kingston,I.B.
TITLE (TI): Genomic organization of the Caenorhabditis elegans lipoprotein receptor (lr) gene
JOURNAL (SO): Unpublished

REFERENCE: 2 (bases 1 to 3935)
AUTHOR (AU): Tang,P.; Kingston,I.B.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (01-JUL-1996) Department of Parasitology, Chang Gung College of Medicine and Technology, 259 Wen-hwa 1st Road, Kweishan, Taoyuan 333, Taiwan

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